

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887

Stormwater Pollution Prevention Plan

Prepared by the Sussex County Division of Engineering One Spring Street Newton, NJ 07860 Developed October 2004 Plan Revision April 2019

> William Koppenaal, P.E. County Engineer

Plan Data Update: April 2019

Annual Certification

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887

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

933136
SUSSEX CNTY
January 1, 2018 through December 31, 2018
NJG0149730
DST090001

Name: Title: Contact Type: Organization Name: Organization Type: E-Mail:	Bill Koppenaal County Engineer Stormwater Coordinator SUSSEX CNTY County dpw@sussex.nj.us (072) 570-0420 (Work Dhene Number)
Phone:	(973) 579-0430 (Work Phone Number) (973) 579-0444 (Fax Number)
Contact Address:	1 SPRING ST Newton, New Jersey 07860

Attachment Name	Attachment Description	File Name
Post Const Checklist	Bridge X-09	SC HA Post Construction Checklist Bridge X-09.pdf
Post Const checklist	Bridge X-11	SC HA Post Construction Checklist Bridge X-11.pdf
Post Const Checklist	Bridge D-21	SC HA Post Construction Checklist Bridge D21.pdf
Project Summary	Project Summary	2018 Major Project Summary Final.pdf

Team member responsible for completing the report:	Bill Koppenaal
Team member email address:	bkoppenaal@sussex.nj.us

1. Have you revised your Stormwater Pollution Prevention Plan to incorporate changes required by the renewal permit?	Yes
2. Date the SPPP was revised:	04/23/2018

1. Are you complying with applicable State and local public notice requirements when providing for public participation in the	
	Yes

1. For major development on property that you own or operate, are you ensuring compliance with the applicable design and performance standards established under N.J.A.C. 7:8?	Yes
2. Are you ensuring adequate long-term operation and maintenance of stormwater BMPs on property that you own or operate?	Yes
3. For storm drain inlets that you install, are you complying with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials?	Yes
4. Between January 1, 2018 and December 31, 2018 has your Highway Agency begun construction for any new development and/or redevelopment project that meets the definition of major development?	
If your Highway Agency has begun construction for any new development and/or redevelopment project that meets the definition of major development you must upload the New Development Project Summary Checklist.	Yes

1. Have you developed a Local Public Education Program?	Yes
2. Date the program was developed:	11/06/2005
3. Do you operate any rest areas or service areas?	No
4. Are you providing educational materials at rest areas and service areas?	

1. Have you established a storm drain inlet labeling program?	Yes
2. Indicate the percentage or number of sectors labeled to date:	100%

3. Other Amount:	
4. Is your Highway Agency maintaining the labels (i.e. replacing and/or repainting)?	Yes

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

1. Improper Disposal of Waste Control:	Yes
2. Date adopted:	07/12/2006
3. Illicit Connection Control:	Yes
4. Date adopted:	07/12/2006
5. Refuse Container/Dumpster Control:	N/A - we don't have the authority to adopt this
6. Date adopted:	
7. Status of these regulatory mechanisms:	
8. Method(s) of enforcement (e.g., agency personnel disciplinary actions, additional signs, etc.):	Employee disciplinary actions, annual SOP distributions and implementation support, development of internal work process guides.
9. Do you operate any rest areas and/or service areas?	No
10. Pet Waste Control:	
11. Date adopted:	
12. Wildlife Feeding Control:	
13. Date adopted:	
14. Status of these ordinances:	
15. Method(s) of enforcement (e.g., agency personnel disciplinary actions, additional signs, etc.):	

1. Have you developed a Litter Pick Up Program?	Yes
2. Estimated number of days between January 1, 2018 and December 31, 2018 that litter pick ups were performed:	125
3. Estimated amount of materials collected:	16.4
4. Units:	Tons

1. Have you completed the MS4 outfall pipes mapping?	Yes
2. Date completed:	07/10/2007
3. Number of outfall pipes within the Highway Agency:	1139
4. Number of outfall pipes mapped:	1139

1. Have you completed an illicit connection inspection for all outfall pipes?	Yes
2. Total number of outfall pipes physically inspected during this reporting period:	400
3. Number of outfall pipes found to have an illicit connection during this reporting period:	0
4. Number of illicit connections eliminated during this reporting period:	
Please attach, in a format provided by the Department, a list of all outfalls found to have an illicit connection since the inception of the program. The list must include the outfall location, receiving water body, source of illicit connection and the date the illicit connection was eliminated.	0

1. Were all required streets swept?	Yes
2. What was the total number of miles swept?	620

Please list the total amount of materials collected for each month since January 1, 2018, and indicate the unit of measurement used to report these materials.

3. Units:	Tons
4. January:	3
5. February:	180
6. March:	90
7. April:	586

8. May:	1091
9. June:	508
10. July:	522
11. August:	242
12. September:	58
13. October:	59
14. November:	23
15. December:	16
16. Total (<i>The Total will be displayed in ton units. If you have selected cubic yards as your reporting unit of measurement, be aware that the total will be converted to tons, 1.053 cubic yards = 1 ton.</i>):	3378
17. If reporting zero (0) for a month above, please explain:	

	Yes - however some exemptions granted
2. How many storm drain inlets were retrofitted?	56

Stormwater facilities include, but are not limited to, catch basins, detention basins, filter strips, riparian buffers, infiltration trenches, sand filters, constructed wetlands, wet basins, bioretention systems, low flow bypasses and stormwater conveyances. Please keep an inventory of stormwater facilities indicating type, function and location in a format provided by the Department onsite and available for inspection or upon request.

1. Have	vou develor	oed a Storr	nwater Facilit	y Maintenance	Program?	IIYe
1 111010			intracer raeme	, i laniconarioo		11.1

'es

1. Were all stormwater facilities that you operate inspected?	Yes
2. Were any found to be in need of cleaning or repair in order to function properly?	Yes
3. Was the cleaning performed?	
4. Were repairs made?	N/A - no repairs needed

1. Total number of catch basins that you operate:	4335
2. Total number of catch basins inspected:	4335
3. Total number of catch basins cleaned:	522
4. Amount of materials removed from catch basins: 250	
5. Units:	Tons

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

1. Have you developed a prioritized list of outfall pipes requiring	
outfall pipe stream scouring remediation?	Yes

1. Have you developed a Roadside Vegetation Management Program?	Yes
2. Are you only applying herbicides, in a 2' radius, around structures where it is not practical to mow?	N/A - we do not apply herbicides
3. Is mulch stabilized after applications consistent with the Standards for Soil Erosion and Sediment Control in New Jersey?	N/A - we do not lay mulch

1. Do you have a permanent structure for de-icing material storage?	Yes
2. If sand is being stored outside, is it set back 50 feet from storm sewer inlets, ditches or other stormwater conveyance channels, and surface water bodies?	Yes

١r

1. Are you implementing Standard Operating Procedures for vehicle	Yes
fueling and receiving of bulk fuel deliveries at maintenance yard	
operations?	

1. Are you implementing Standard Operating Procedures for vehicle	
maintenance and repair activities at maintenance yard operations?	Yes

1. Are you implementing Good Housekeeping Practices for all materials or machinery listed in the Inventory Requirements for Highway Agency Maintenance Yard Operations (including maintenance activities and ancillary operations)? Yes

1. Has your Highway Agency implemented measures to properly handle the discharge of equipment and vehicle wash wastewater from your municipal maintenance yard operations?	Yes
2. Please indicate which option you implemented to eliminate the unpermitted discharge:	Ceased the discharge (no longer wash onsite)
3. Date the management measure was implemented:	02/28/2009
4. What is your NJPDES permit number that authorizes the discharge of vehicle and equipment wash wastewater?	
5. Are you maintaining records of vehicle and equipment washing?	N/A - we do not wash our vehicles

1. Did you conduct an annual employee training program for appropriate employees on appropriate topics (e.g., police officers trained on ordinances)?	Yes
2 + ist data(s) of amployee training:	Forman Meeting Summer 2018, new employee training as needed.

Do you share services with another entity to satisfy a permit	
requirement?	No

1. Did your Highway Agency have any incidents of non-compliance?	No
2. Identify the steps being taken to remedy the noncompliance and to prevent such incidents from recurring. (If the text box is not large enough to complete this section, please provide your report as an attachment and upload it on the next screen. Please reference the attachment in the textbox.)	

Certifier:	Bill Koppenaal
Certifier ID:	SUSSEXDPW
Challenge/Response Question:	Something you always wanted to do?
Challenge/Response Answer:	****
Certification PIN:	*****
Date/Time of Certification:	04/25/2019 11:28

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

"I certify that the municipality is in compliance with its stormwater program, Stormwater Pollution Prevention Plan (SPPP) and the NJPDES Highway Agency Municipal Stormwater General Permit No. NJG0149730 except for any incidents of non-compliance which are identified herein. For any incidents of non-compliance, the Annual Report identifies the steps being taken to remedy the non-compliance and to prevent such incidents from recurring.

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

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

Bill Koppenaal 04/25/2019

SPPP

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887

NJPDES Highway Agency Stormwater General Permit Stormwater Pollution Prevention Team Members Number of team members may vary. Sussex County Division of Engineering October 14, 2004	Completed by: <u>Bill Koppenaal</u> Title: <u>County Engineer</u> Highway Agency Name: <u>County of Sussex</u> NJPDES #:NJG <u>0149730</u> PIID #: <u>222158</u> Effective Date of Permit Authorization (EDPA): <u>04/01/2004</u> Date form complete: <u>Oct 14, 2004</u> Date of most recent update: <u>4/23/2019</u>			
Program Coordinator: <u>Bill Koppenaal</u> Program Manager: <u>Bill Koppenaal</u> Title: <u>County Engineer</u> Title: <u>County Engineer</u> Office Phone #: <u>973-579-0430</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #: <u>973-903-8410</u>				
Public Notice Coordinator: <u>Michelle Mezger</u> Title: <u>Department Head Secretary - Division of A</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:	Engineering			
Post-Construction Stormwater Management Title: <u>County Engineer</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:	: Coordinator: <u>Bill Koppenaal</u>			
Local Public Education Coordinator: <u>Bill Koppenaal and Thor Carlson Web Mngr</u> Title: <u>County Engineer and County Web Administrator</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:				
Regulatory Mechanism Coordinator: <u>Bill Koppenaal</u> Title: <u>Senior Engineering Aide</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:				
Physical Operations Coordinator: <u>Scott House</u> Title: <u>Superintendent - Division of Public Works Office of Roads and Bridges</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:				
Employee Training Coordinator: <u>Scott House</u> Title: <u>Superintendent - Division of Public Works Office of Roads and Bridges</u> Office Phone #: <u>973-579-0430</u> Emergency Phone #:				
Other: <u>John Bazelewich and Joe Biuso</u> Title: <u>Fleet Manager & Facilites Manager</u> Office Phone #: <u>973-579-0350</u> Emergency Phone #:				

SPPP Form 2 – Public Notice

Highway Agency Name: County of Sussex

Information NJPDES # :NJG0149730 PI ID #: 222158

Highway Agency

Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: <u>10/21/2004</u> Date of most recent update: <u>4/23/2019</u>

Local Public Education Program

Sussex County's Public Notice compliance efforts shall comply with:

- For any meetings where public notice is required under the Open Public Meetings Act ("Sunshine Law," N.J.S.A. 10:4-6 et seq.), the County of Sussex provides public notice in a manner that complies with the requirements of that Act.

-When adopting a county budget the County of Sussex provide public notice in a manner that complies with the requirements of the Local Budget Law, N.J.S.A. 40A:4-1 et seq.

-Resolutions of the County of Sussex Board of Chosen Freeholders that provide a penalty for violation thereof, the County of Sussex provides public notice in a manner that complies with the requirements of N.J.S.A. 40:24-3.

SPPP Form 3 – New Development and **Redevelopment Program**

Highway Agency Name: County of Sussex

nformation NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 03/7/2005 Date of most recent update: April 23, 2019

Local Public Education Program

The Sussex County Division of Engineering designs or oversee the design of all transportation projects which are considered be "New Development and Redevelopment" by this permit. The Division stives to ensure all projects on lands owned or operated by the County will comply with current design standards for stormwater runoff. As such, it is our goal, whenever possible, projects distrubing one or more acres of land or creating an additioanl one-quarter acre or more of impervious surface be design and constructed in compliance with the design and performance standards found in N.J.A.C. 7:8 for major development unless exempted. Stormwater inlets used in the construction of these projects will, whenever possible, comply with attachment "C"entitled "Design Standard - Strom Drain Inlets" of the R12-highway Agency Stormwater General Permit.

Sussex County employes the design and performance standards of N.J.A.C 7:8 and permit attachment "C" as noted above.

County design effots will include a focus on:

1.) nonstructural stormwater management

2.) infiltration and graoundwater recharge

3.) stormwater runoff qualtiy

4.) maintenance

Highway Agency

Sussex County will maintain an active list of ongoing and planned projects which can be utilized to identify project compliance with the performance and design standards. This list will be mainatined and certified annually.

The County of Sussex will strive to ensure all stormwater management systems on property owned and operated by the County are maintaned in proper working order. Maintenance recommendations developed through design development will be followed to the best of our ability. The county will use the BMP manual's maintenance recommendations a guidance in developing a maintenance and operating procedure. The County will develop and maintain maintenance records for related activities.

SPPP Form 4 - Local Public Education Program

Highway Agency Name: County of Sussex

Information NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/21/2004 Date of most recent update: April 23, 2019

Local Public Education Program

Local public education requires that the highway agency educate appropriate system users and employees on impacts their activities have on stormwater quality. Education is to be accomplished through distribution of appropriate materials to users and employees. Distribution materials can take the form of calendars, brochures, signs, sheets or booklets. Educational information shall be provided on the following topics:

1. Wildlife Feeding

Highway Agency

- 2. *Pet waste control*
- 3. Improper disposal of waste
- 4. The agencies Storm Drain Inlet Labeling Program

The recommended place of distribution is for a highway agency to make this information available at service areas and rest stops.

Sussex County does not own or operate any service areas along the County highway system. The county has determined that the most efficient way to provide for public education on required topics is as follows:

- Post information at District County Maintenance Facilities warning about improper disposal of waste.
- Include information to educate the public about non-point source pollution on the Official *County Map. The, when available, map will be distributed to the general public through the* Sussex County Chamber of Commerce, through the Division of Engineering, and at the county building during the Sussex County Farm and Horse Show.
- Provide links on the Sussex County Web site to www. Nistornwater.org along with the "Solutions to Stormwater Pollution"
- Post signs at the county maintenance facilities with information pertaining to the storm drain inlet labeling program and proper disposal of waste.

SPPP Form 5 – Storm Drain Inlet Labeling

Highway Agency Name: County of Sussex

[NJPDES # :NJG<u>0149730</u> PI ID #: <u>222158</u>

Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/21/2004 Date of most recent update: April 23, 2019

Storm Drain Inlet Labeling

The county is aware the permit requires storm drain labeling at rest areas, service areas, maintenance facilities, and streets with sidewalks. Sussex County does not own or operate any rest areas or service areas.

Sussex County conducted a survey of the roadway network and identified sections of roads that are governed by this permit requirement. Sussex County developed a manageable schedule for the labeling of the required inlets located along both roadways and within our maintenance facilities.

Markers including a label "NO DUMPING DRAINS TO WATERWAY", or similar have been placed on storm drain inlets. Current County labels include the following types:

- cast object markers placed with either adhesive or mechanical anchors
- grate castings with the label incorporated into the grate casting.

Safety concerns dictate that high speed/high risk roadways be labeled by Sussex County Division of Public Works personnel. Employees also labeled storm drains located within our maintenance yards.

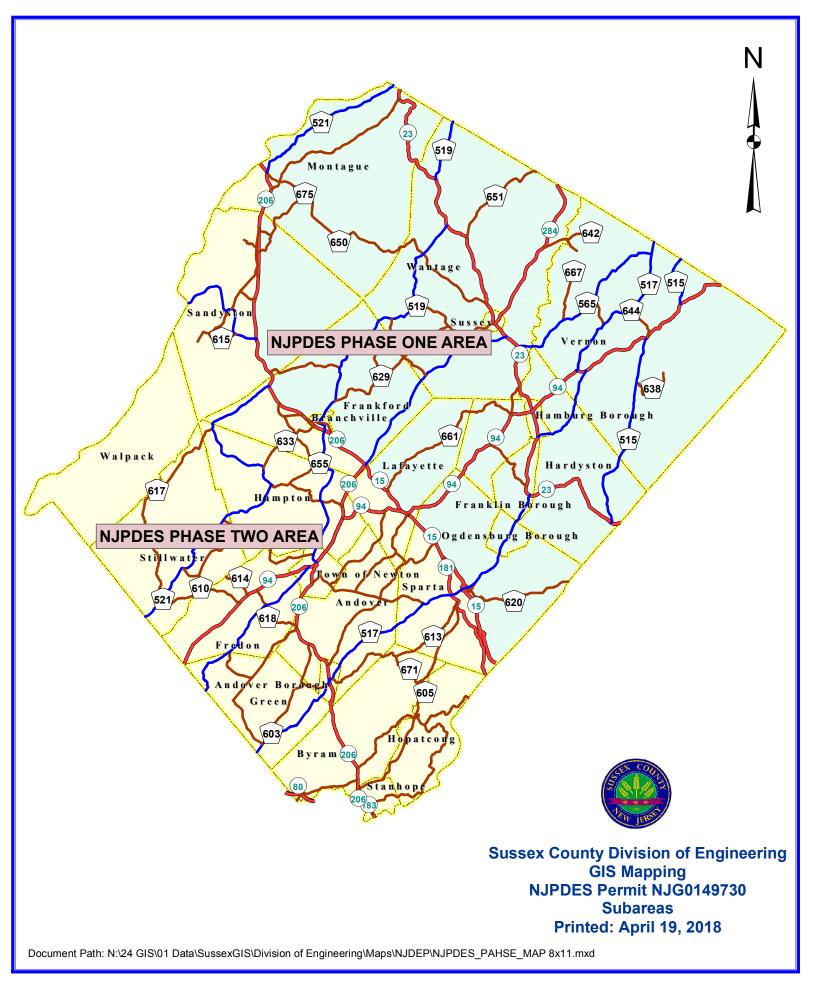
As storm drain inlets are replaced, the new inlets will have a stamped message from the foundry.

Scheduling complied with the permit requirements indicating that at least 50% of the inlets be labeled no later then April 2007 and the remaining inlets completed by April 2009.

All storm drain inlet labels will be inspected periodically as resources permit and maintain actions scheduled and prioritized with other Sussex County Division of Public Works demands.

The County is investigating automation of the annual inspection and O&M tasks through interactive GIS mapping applications and work flow methodologies. Ideally an automated system will be incorporated into the annual operations in the near future.

Highway Agency Information



SPPP Form 6 – MS4 Outfall Pipe Mapping

Highway Agency Name: <u>County of Sussex</u>

NJPDES # :NJG<u>0149730</u> PI ID #: <u>222158</u>

Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: <u>10/26/2004</u> Date of most recent update: <u>April 23, 2019</u>

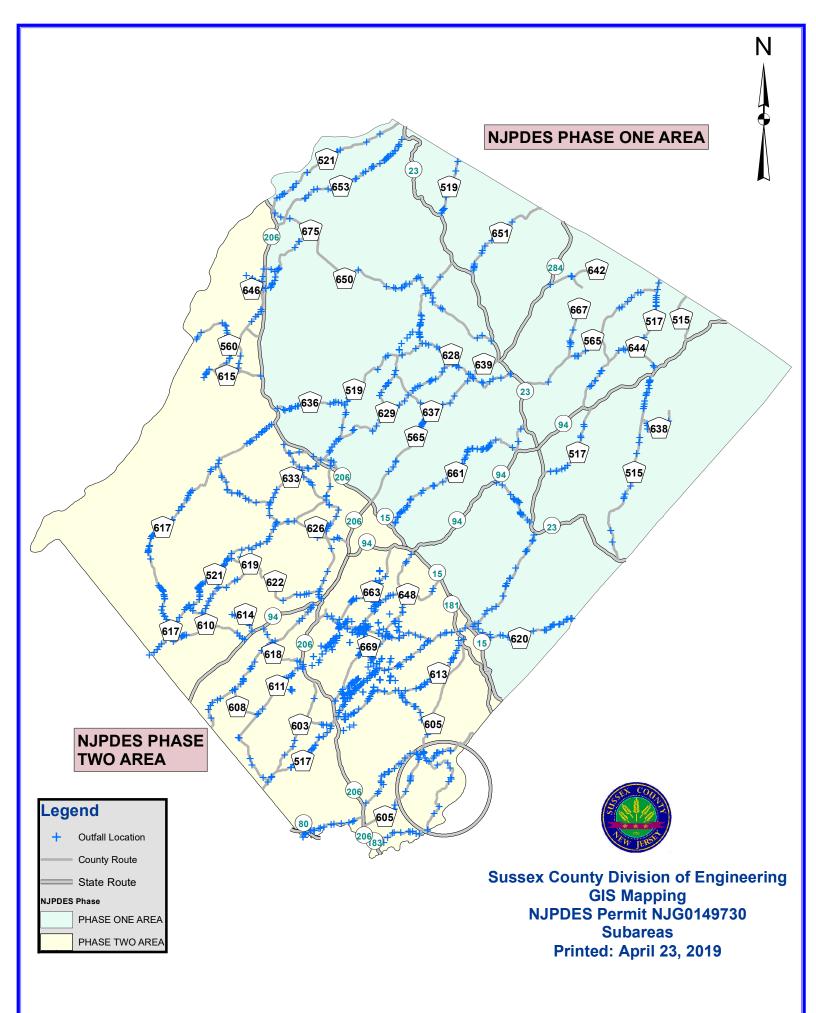
Sussex County Division of Engineering and Bridge and Sign employees mapped known and discovered outfall locations utilizing GPS location equipment. Mapping included identification of County Stormwater Collection System outfall pipe terminus. Each Outfall was assigned a unique alphanumeric identifier which links to the county route, point coordinates, type and condition, flow, name and location of the surface water body(ies)receiving discharge from the system outfall. In accordance with the Highway Agency permit, Sussex County Division of Engineering divided the county in two subareas. The first subarea, was comprised of the section of Sussex County north of the State Route 15/State Route 206 corridor, and was mapped within the allotted 36 months (that is by April 2007). The section subarea comprised the portion of the county south of the State Route 206 corridor and was mapped within the remainder of the allotted 60 months (that is by April 2009). (See attached map entitled "Sussex County Division of Engineering, GIS Outfall Mapping, NJPDES PERMIT NJG0149730, County Subareas".)

Outfall data is updated as newer information becomes available. The data is used as a base for O&M efforts.

GIS systems are investigated which could be used to validate the inventory and conduct annual inspections and track work tasks. Ideally these systems will become available for use in the near future.

Sussex County uses this data to manage the infrastructure outfall assets. Mapping was generated using the GIS system at a scale in compliance with Tax Map regulations at N.J.A.C. 7:18-23A.

Highway Agency Information



SPPP Form 7 – Illicit Connection Elimination Program

Highway Agency Name: County of Sussex

Highway Agency

nformation NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/26/2004 Date of most recent update: April 23, 2019

Sussex County Division of Engineering and Bridge and Sign employees conducted an initial physical inspection of all of County outfall pipes during the mapping process. Outfall pipes found to have a dry weather flow or intermittent non-stormwater flow were rechecked for illicit connections by the Division of Engineering. The County used the Illicit Connection Inspection Report form provided by the NJDEP to record the observed information. The following guided effort:

- As appropriate, identified potential illicit connections would be referred to the respective local Health Department.
- Illicit connections discovered which originate from the County's own activities will be _ eliminated within six months.
- If, after the appropriate amount of inspection, the Division is unable to locate the source of the illicit connection it will be noted on the Closeout Investigation Form.
- Potential illicit connections from a public source (e.g., a neighboring municipality), would initiate notification to potential owner with written explanation sent to the NJDEP detailing the results of the investigation.
- Sussex County will only alert the NJDEP of illicit connections found to be from a private entity. If the illicit connection poses an immediate threat, employees have been instructed to call the NJDEP hotline. Separate written notification of such action will also be sent to the NJDEP.

Sussex County had previously established a hotline for the use of reporting spills and illegal dumping through the Sussex County Sherriff and Hazmat Team. The hotline will now be made available for reporting illicit connections.

Day forward review and inspections will be performed in conjunction with scheduled operational work conducted by the Division of Public Works as well as the Division of Engineering responding to reported concerns or reports of possible illicit connections.

Work will also be monitored through the Sussex County Road Opening Permit process.

SPPP Form 8 – Illicit Connection Records

Highway Agency Name: County of Sussex

NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: Bill Koppenaal, County Engineer

nformation Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/26/2004 Date of most recent update: April 23, 2019

Prior to July 1, 2006

Highway Agency

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? Program inspection began summer 2005

Number of outfalls found to have a dry weather flow? 35

Number of outfalls found to have an illicit connection? 617

How many of the Highway Agency's own illicit connections were eliminated? 0

Of the Highway Agency's own illicit connections found, how many remain? 0

How many illicit connections found to emanate from another entity were reported to NJDEP? **O**

July 1, 2006 – June 30, 2007

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 307

Number of outfalls found to have a dry weather flow? 1

Number of outfalls found to have an illicit connection? 0

How many of the Highway Agency's own illicit connections were eliminated? 0

Of the Highway Agency's own illicit connections found, how many remain? 0

How many illicit connections found to emanate from another entity were reported to NJDEP? 0

July 1, 2007 – June 30, 2008

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 68

Number of outfalls found to have a dry weather flow? 17

Number of outfalls found to have an illicit connection? 0

How many of the Highway Agency's own illicit connections were eliminated? 0

Of the Highway Agency's own illicit connections found, how many remain? 0

July 1, 2008 – June 30, 2009

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? <u>115</u>

Number of outfalls found to have a dry weather flow? 39

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? O

Of the Highway Agency's own illicit connections found, how many remain? <u>0</u>

How many illicit connections found to emanate from another entity were reported to NJDEP? 0

July 1, 2011 – June 30, 2012

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 1127

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? O

Of the Highway Agency's own illicit connections found, how many remain? <u>0</u>

July 1, 2012 – June 30, 2013

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 1127

Number of outfalls found to have a dry weather flow? 0

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? **0**

Of the Highway Agency's own illicit connections found, how many remain? <u>0</u>

How many illicit connections found to emanate from another entity were reported to NJDEP?<u>0</u>

July 1, 2013 – June 30, 2014

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 1127

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? 0

Of the Highway Agency's own illicit connections found, how many remain? <u>0</u>

How many illicit connections found to emanate from another entity were reported to NJDEP? 0

July 1, 2014 – June 30, 2015

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 1127

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observe.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? **O**

Of the Highway Agency's own illicit connections found, how many remain? 0

July 1, 2015 – June 30, 2016

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? 1127

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? O

Of the Highway Agency's own illicit connections found, how many remain? 0

How many illicit connections found to emanate from another entity were reported to NJDEP?_0

July 1, 2016 – December 31, 2017

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? +/-560

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? 0

Of the Highway Agency's own illicit connections found, how many remain? 0

How many illicit connections found to emanate from another entity were reported to NJDEP? 0

May 1, 2018 – December 31, 2018

Note: Attach a copy of each illicit connection report form for outfalls found to have a dry weather flow.

Total number of inspections performed this year? +/-400

Number of outfalls found to have a dry weather flow? <u>0</u>

Note: Outfalls are inspected during inlet cleaning process. No new dry weather flow observed.

Number of outfalls found to have an illicit connection? <u>0</u>

How many of the Highway Agency's own illicit connections were eliminated? O

Of the Highway Agency's own illicit connections found, how many remain? <u>0</u>

SPPP Form 9 – Litter Pick Up Program

Highway Agency Name: County of Sussex

NJPDES # :NJG<u>0149730</u> PI ID #: <u>222158</u>

Highway Agency Information

Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/26/2004 Date of most recent update: April 23, 2019

Sussex County has, in the past, worked collaboratively with the community to promote and complete roadside clean-up tasks.

Past efforts have included cooperation with both the Adopt-A-Highway volunteers and the Sussex County Sheriffs SWAP program. Over the past few years both of these programs have been phased out.

With the elimination/suspension of these programs the task has fallen exclusively on the limited resources of the Sussex County Division of Public Works. County Routes are monitored as part of the normal maintenance practices for debris which would result in a public safety issue. As identified and prioritized, debris thought to be a public safety threat will be removed and disposed of at the land fill.

Division of Public Works operations include a county wide roadside clean-up work task programmed, as resources permit, on an annual basis.

Roadside clean-up efforts are monitored and records maintained including a cleaning schedule and amount of trash collected.

Sussex County does not operate any rest or service areas.

SPPP Form 10 – Regulatory Mechanisms

Highway Agency Name: County of Sussex

NJPDES # :NJG<u>0149730</u> PI ID #: <u>222158</u>

nformation Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/26/2004 Date of most recent update: April 23, 2019

Pet Waste Sussex County will not be adopting a pet waste regulatory mechanism because the *County does not own or operate any rest or service areas.*

Improper Disposal of Waste - Date of Adoption: 7/12/2006

Remarks:

Highway Agency

Wildlife Feeding - Date of Adoption: <u>n/a</u>

Remarks: not applicable

Illicit Connections – Date of Adoption: 7/12/2006

Remarks:

The above noted resolutions were adopted by Freeholder Resolution. Enforcement will be through employee management and include disciplinary actions for violations.

SPPP Form 11 – Storm Drain Inlets (Retrofitting)						
Highway Agency Information						
Most	t type of storm drain inlet design t Sussex County projects will incorp ype B. Type B will also utilize curb	orate the NJL	DOT bicycle sa	afe grate for inl		
ora	aving, repairing, reconstruction alteration project name (attach ditional pages as necessary)	Projected start date	Start date	Date of completion	<mark># of</mark> storm drain inlets	<mark># of</mark> storm drains with exemp tions
Resut	rfacing CR 519, from Warren Cnty line to SR 94		April 6, 2018	May 4, 2018		0
	urfacing CR 521, from US 206 to CR NY State Line (Montague)		July 20, 2018	Aug 10, 2018		0
Resu	rfacing CR 618, from SR 94 to US 206		May 4, 2018	May 9, 2018		0
Rest	urfacing CR 619, from CR 622 to CR 610		May 10, 2018	May 18, 2018		0
Rest	urfacing CR 636, from US 206 to CR 519		May 30, 2018	June 7, 2018		0
Res	urfacing CR 650, from US 206 to Wantage Twp Line		July 2, 2018	July 19, 2018		0
Resi	urfacing CR 669, from CR 616 to NYS&W RR Tracks		May 23, 2018	May 29, 2018		0

Resurfacing CR 673, from Wantage Twp Line to SR 23		Aug 13, 2018	Aug 14, 2018		0
Resurfacing CR 517, from CR 620 to Ogdensburg Line		Aug 15, 2018	Aug 24, 2018		0
Are you claiming any alternate device above projects? No Please explain.	exemptions	s or historic p	lace exemptio	ons for an	y of the

SPPP Form 12 – Street Sweeping and Road **Erosion Control Maintenance**

Highway Agency Name: County of Sussex

NJPDES # :NJG0149730 PI ID #: 222158

Highway Agency

nformation Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA):04/01/2004

Date of Completion: 10/15/2004 Date of most recent update: April 23, 2019

Street Sweeping

Sussex County has determined which roads within the network require monthly sweeping under the Highway Permit. A program was initiated in 2005 and has been managed by the Division of Public Works which, as resources and conditions permit, provides for the monthly street sweeping of the identified county route sections. Additionally, the program includes for the annual street sweeping of all county routes. The Division of Engineering created performance logs which aid in the management and tracking of the program. The performance logs are complied and an annual report prepared by the Division of Engineering.

Road Erosion Control Maintenance

Sussex County through the Division of Public Works has an active program to identify stabilize roadside erosion. Upon identification of a shoulder or buffer area exhibiting roadside erosion the remediation needs will be defined and prioritized into the work queue to be advanced as resources permit. Repairs will be completed in compliance with the Standards for Soil Erosion and Sediment Control in New Jersey. The County will maintain a Roadside Erosion Inspection Log that will include a list of erosion locations, priorities, repairs and project dates. Logs will be maintained by the Division of Public Works and used by the Division of Engineering to compile annual work reports.

SPPP Form 13 – Stormwater Facility Maintenance

Highway Agency Name: County of Sussex

nformation NJPDES # :NJG 0149730 PI ID #: 222158

Highway Agency

Team Member/Title: Bill Koppenaal, County Engineer

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/15/2004 Date of most recent update: April 23, 2019

Sussex County maintains its annual catch basin cleaning schedule in compliance with the minimum standard set forth in the Highway Agency Permit. The task is assigned to the Sussex County Division of Public Works with program guidance generally including:

- Annually, as staffing resources and conditions allow, each catch basin will be inspected for accumulations of sediment, trash or debris. Debris observed will be cleaned.
- *Catch basins will be inspected annually, unless evidence would support an alternate schedule,* either shorter or longer interval durations
- During the inspection, the catch basins will be reviewed for proper function and structural issues.
- Identified maintenance needs will prioritized into the Division of Public workload queue and as resources and conditions permit be scheduled.
- Debris collected will be staged at one of the Sussex County Road Maintenance District Garages. Staging will be completed in consideration of standards established in guidance provided by the NJDEP Division of Solid and Hazardous Waste.
- *Litter will be sorted from clean up material staging piles for recycling.*
- Pending available recourses, on a monthly basis the staging piles will be hauled to the Sussex *County Municipal Utilities Authority landfill for disposal. Permission has been granted by the* Sussex County Sewage Authority to discharge water from catch basin cleaning into their sanitary sewers.
- Waste will be tested as needed for hazardous materials.

The program is has been active since April 2005.

Stormwater Management Facilities:

In addition to the stormwater collection system catch basis the County owns and operates a few stormwater management facilities designed to:

- Enhance water quality.
- *Promote infiltration*.
- Manage stormwater collection and release.

Sussex County Division of Engineering has developed and the Division of Public Works manages a program to inspect and maintain these facilities. This program is intended to assure the short and long term operation and function of the facility. The program generally includes:

- Inspection in consideration of the recommended operation manual.
- Maintenance in consideration of the recommended operation manual.
- *Prioritization of maintenance and repairs within the Division of Public Works work queue with advancement as resources permit.*

SPPP Form 14 - Roadside Vegetation Management

Highway Agency Name: County of Sussex

Highway Agency Information NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: <u>10/15/2004</u> Date of most recent update: <u>April 23, 2019</u>

The County of Sussex manages roadside vegetation through the use of mechanical removal, i.e. mowers and weed trimmers. The County does not utilize herbicides or mulch to control roadside vegetation.

SPPP Form 15 - Outfall Pipe Stream Scouring Remediation

Highway Agency Name: County of Sussex

NJPDES # :NJG0149730 PI ID #: 222158

Highway Agency

Team Member/Title: Bill Koppenaal, County Engineer

nformation Effective Date of Permit Authorization (EDPA): 04/01/2004

Date of Completion: 10/15/2004 Date of most recent update: April 23, 2019

Sussex County has developed and implement a stormwater outfall pipe stream scouring detection, remediation, and maintenance program to detect and control localized stream and stream bank scouring in the vicinity of the highway system outfall pipes operated by the County.

The program utilizes inventory data collected and complied during the outfall pipe mapping task. *Generally the program includes:*

- As resources permit, annual inspections of the outfalls.
- Data collection for those locations exhibiting scour.
- Identification and prioritization of outfall pipe scour distress. Higher priority will be provided to those outfall pipes most in need of remediation, NJDEP permitting and/or other permitting needs, and those with easy access.
- Development of a remediation schedule for repairs,
- Repairs will be made in consideration of guidance provided within the Standards for Soil Erosion and Sediment Control in New Jersey.

SPPP Form 16 – De-icing Material Storage

Highway Agency Name: County of Sussex

Highway Agency Information NJPDES # :NJG0149730 PI ID #: 222158

Team Member/Title: *Bill Koppenaal*, *County Emgineer*

Effective Date of Permit Authorization (EDPA): April 01, 2004

Date of Completion: 2005 Date of most recent update: April 23, 2019

De-icing Material Storage

The County of Sussex upgraded our existing deicing materials storage buildings located at the district maintenance facilities.

This upgrade provides for the adequate storage capacity capable of containing all raw salt materials and mixed materials used in our delicing operations.

SPPP Form 17 – Standard Operating Procedures

Highway Agency Name: County of Sussex

NJPDES # :NJG<u>0149730</u> PI ID #: <u>222158</u>

Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA): <u>April 01, 2005</u>

Highway Agency Information Date of Completion: _____Date of most recent update: <u>April 23, 2019</u>

BMP	Date SOP went into effect	Describe your inspection schedule
Fueling Operations (including the required practices listed in Attachment D of the permit)	2005	Inspection will be performed periodically by management staff. Internal Best Management Practices are being developed to assist management in complying with the SOP.
Vehicle Maintenance (including the required practices listed in Attachment D of the permit)	2005	Inspection will be performed periodically by management staff. Internal Best Management Practices are being developed to assist management in complying with the SOP.
Good Housekeeping Practices (including the required practices listed in Attachment D of the permit)	2005	Inspection will be performed periodically by management staff. Internal Best Management Practices are being developed to assist management in complying with the SOP.

SPPP Form 18 – Employee Training

Highway Agency Name: <u>County of Sussex</u>

<u>ה ה NJPDES # :NJG*0149730*</u> PI ID #: <u>222158</u>

E Team Member/Title: <u>Bill Koppenaal, County Engineer</u>

Effective Date of Permit Authorization (EDPA):<u>April 01, 2004</u>

Date of Completion: 03/11/2005 Date of most recent update: April 23, 2019

For Employee training, Sussex County groups the required topics together based upon similarities in context. Any questions should be directed to the Employee Training Coordinator, Scott House and Bill Koppenaal, who can be reached at 973-579-0430.

Primary permit training was completed. Refresher training will be a seminar type forum held at various county facilities and in conjunction with regularly scheduled Forman meetings. Only employees directly involved in the specific task will participate in the refresher training.

Training will include discussion on the following topics:

Construction Activity: Post –construction Stormwater Management in new development and redevelopment. Refresher Training will be provided to the design and maintenance foremen on stormwater controls and maintenance needs.

Storm System Outfall Pipes: Refresher Training sessions will include reviews on Illicit connections, outfall pipe inventory mapping, outfall scour remediation.

Highway System Operations: Refresher Training will include direction on roadside vegetative management, street sweeping, stormwater facility maintenance, storm drain inlet labeling and maintenance yard operations.

Waste Disposal refresher training will include overviews of Improper waste disposal and illicit connection prohibition.

The Department is now utilizing the services of Environmental Safety Management Corporation to assist with the updating, implementation, and training of the permit elements and SOP's.

Highway Agency Information

Koppenaal, Bill

From:	Koppenaal, Bill
Sent:	Tuesday, April 23, 2019 1:34 PM
То:	Scott House; Sinke, Matthew; Pierce, Bob; Bazelewich, John
Cc:	Poff, Gregory; McDonald, James; Biuso, Joe
Subject:	Sussex County Highway Agency Stormwater Permit - Standard Operating Procedures
Attachments:	2019 Standard Operating Procedures.pdf

Gentleman,

Attached are the following Standard Operating Procedures:

- Spill Response
- Vehicle and Equipment Fueling
- Vehicle Maintenance
- Good Housekeeping

These were developed as a minimum basic requirement of the County Highway Agency Stormwater NJPDES Permit. They are intended to minimize operational impacts on the surrounding environment with a focus on controlling non-point source pollution of stormwater runoff.

Please be aware we are currently working on updating the SOP's, developing guidance on implementation, conducting site inspections, and a related staff training program, I anticipate this initiative will be completed during 2019.

As Senior Management Staff you are responsible to understand and ensure implementation within your respective areas of County Operations.

Please:

- Take time to read and understand the SOP's.
- Determine applicable implementation within your respective areas of our operations.
- Provide any feedback or constructive input which you believe will enhance the intent or the SOP or their implementation.
- Review and train your respective staff on implementation of the SOP's
- Post the SOP's on your operational information boards and other appropriate areas within your facilities.
- Redistribute within our organization as may be appropriate, let me know if additional supervisory staff should be added to future distributions.
- Ensure implementation by your respective staff for your areas of the operation.
- Report any concerns or potential compliance issues to myself and Joe Biuso.

I am available should there be any questions or comments.

Thank You, Bill Koppenaal, P.E. County Engineer/Administrator, Department of Engineering and Planning Sussex County Division of Engineering One Spring Street Newton, NJ 07860 973-579-0430

A Please consider the environment before printing this email.



Sussex County Standard Operating Procedures Vehicle and Equipment Fueling

Introduction and Purpose

This SOP is intended to introduce persons to the proper care and use of fueling equipment for the purpose of maintaining a safe workplace and for the protection of the environment. Vehicle and equipment fueling procedures and practices are designed to minimize pollution of surface or ground waters. Understanding the procedures for delivering fuel into vehicles, mobile fuel tanks, and storage tanks is critical for this purpose. Safety is always the priority.

<u>Scope</u>

These procedures are to be implemented at all maintenance yards with fuel dispensing systems, including mobile fueling operations.



VEHICLE FUELING

- Shut the engine off
- Ensure that the fuel is the proper type
- Absorbent spill clean-up materials and spill kits shall be available in fueling areas and on mobile fueling vehicles and shall be disposed of properly after use. Spill kits shall be inspected periodically and renewed as needed
- Nozzles used in vehicle and equipment fueling shall be equipped with an

automatic shut-off to prevent overfill.

- Fuel tanks shall *not* be "topped off."
- Mobile fueling shall be minimized. Whenever practical, vehicles and equipment shall be transported to the designated fueling area in the maintenance yard. Mobile fueling shall have on-board spill kits
- Clearly post, in a prominent area of the facility, instructions for safe operation of fueling equipment, and appropriate contact information for the person(s) responsible for spill response. See typical example of signage (attached)



BULK FUELING

- Drip pans or absorbent pads shall be used under all hose and pipe connections and other leak-prone areas during bulk fueling.
- As applicable, block storm sewer inlets, or contain tank trucks used for bulk transfer, with temporary berms or temporary

absorbent booms during the transfer process. If temporary berms are being used instead of blocking the storm sewer inlets, all hose connection points associated with the transfer of fuel must be within the temporary berms during the loading/unloading of bulk fuels.

- Protect fueling areas with grading, berms and/or dikes to prevent run-on, runoff, and to contain spills.
- A trained employee must always be present to supervise during bulk transfer.

Spill Response

- Provide spill containment dikes or secondary containment around stored oils and other fluid storage drum(s). Or, use dual wall storage systems with periodic interstitial monitoring and written log of activities
- Conduct cleanups of any fuel spills immediately after discovery. Refer to the Spill Response Standard Operating Procedure for standard cleanup methods and requirements.

Maintenance and Inspection

- Fueling areas, spill and delivery kits and storage tanks shall be visually inspected monthly. Apparent Hazards or other problems are to be reported in-writing to the facility supervisor.
- Keep an ample supply of spill cleanup material on the site.
- Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be taken out of service, then repaired or replaced immediately.
- Refer to the Sussex County Highway Agency Stormwater Permit Best Management Practices Guide for information on Maintenance and Inspection.



Sussex County Standard Operating Procedures Vehicle Maintenance

Maintenance Yard BMP Objectives

- 1. Waste Management
- 2. Spill Prevention, Containment and Countermeasures
- 3. Pollution Control



Introduction and Purpose

This SOP contains the basic practices of vehicle maintenance to be implemented at all maintenance yards including maintenance activities at ancillary operations for all County operations where vehicle maintenance is a part of the work. The purpose of this SOP is to provide a set of guidelines for vehicle maintenance at yards, garages or other facilities including maintenance activities at ancillary operations.

<u>Scope</u>

This SOP applies to all maintenance of vehicles and equipment on County properties and job sites.

Standards and Specifications

- Conduct vehicle maintenance operation only in designated areas on impervious surface
- Whenever possible, perform all vehicle and equipment maintenance at an indoor location with a paved floor.
- Always use drip pans.
- Absorbent spill clean-up materials shall be available in maintenance areas and shall be disposed of properly after use.
- Maintenance areas shall be protected from stormwater run-on and runoff, and shall be located at least 50 from feet downstream drainage facilities and watercourses.
- Use portable tents or construct a roofing-device over long-term maintenance areas for projects that must be performed outdoors.
- Do not dump or dispose oils, grease, fluids, and lubricants onto the ground, into catch basins or other structures like sanitary systems, and floor drains.

- Do not dump or dispose batteries, used oils, antifreeze, parts cleaning solution and/or other toxic fluids into a floor or yard drain, toilets, storm drains or watercourse.
- Do not bury tires or other materials. Use proper/legal disposal methods
- Collect waste fluids in properly labeled containers and dispose properly.
- Vehicle Rinsing shall only be permitted following de-icing application. Prior to rinsing, all loose materials shall be hand swept from equipment and returned to storage material storage facility. Rinsing is limited to cold water, no under-body or under-hood and the use of other products (soaps, detergents, degreasers) are *not* permitted during post storm vehicle rinsing,

Spill Response and Reporting

- Provide spill containment dikes or secondary containment around stored oils and other fluid storage drum(s). Or, use dual wall storage systems with periodic interstitial monitoring and written log of activities
- Conduct cleanups of any fuel spills immediately after discovery. Refer to the Spill Response Standard Operating Procedure for standard cleanup methods and requirements.

Maintenance and Inspection

• Refer to the Sussex County Highway Agency Stormwater Permit Best Management Practices Guide for information on Maintenance and Inspection.



Sussex County Standard Operating Procedures Good Housekeeping

Good Housekeeping Goals

- 1. Proper Recycling
- 2. Proper Waste Disposal
- 3. Pollution Prevention

Introduction and Purpose

The purpose of this SOP is to introduce workers and others to the basic practices of good housekeeping implemented at maintenance yards including maintenance activities at ancillary operations. Additionally, the purpose of this SOP is to provide a set of guidelines to County employees for Good Housekeeping Practices at their maintenance yards including ancillary operations.

Scope

This SOP applies to all maintenance yards including maintenance activities at ancillary operations in the Sussex County Division of Public Works.

Standards and Specifications (General)

- All containers should be properly labeled and marked, and the labels must remain clean and visible.
- All containers must be kept in good condition and tightly closed when not in use.
- Unless impractical, chemicals, fluids and supplies should be kept indoors.
- If containers are stored outside, they must be covered and placed on spill containment platforms.
- Keep storage areas clean and well organized.
- Spill kits and drip pans must be kept near any liquid transfer areas, protected from rainfall.
- Absorbent spill clean-up materials must be available in maintenance areas and shall be disposed of properly after use.
- Place contaminated trash, dirt and other debris in the trash receptacle.
- Collect waste fluids in properly labeled containers and dispose of them properly within the disposal cube(s).



• Establish and maintain a recycling program by disposing of papers, cans, bottles and trash in designated bins.



<u>Standards and Specifications (Salt and Deicing</u> <u>Material Handling)</u>

- During loading and unloading of salt and de-icing materials, prevent and/or minimize spills. If salt or de-icing materials are spilled, remove the materials using dry cleaning methods. All collected materials shall be either reused or properly discarded.
- Sweeping should be conducted once a week to get rid of dirt and other debris. Sweeping should also be conducted immediately following loading/unloading activities, when practical.
- Minimize the tracking of materials from storage and loading/unloading areas.
- Minimize the distance that salt and de-icing materials are transported during loading/unloading activities.
- Any materials that are stored outside must be tarped when not actively being used and placed on an impervious surface
- If interim seasonal tarping is being implemented, de-icing materials may be stored outdoors only between October 15th through April 30th.

Spill Response and Reporting

• Conduct cleanups of any fuel spills immediately after discovery. Refer to the Spill Response Standard Operating Procedure for standard cleanup methods and requirements.

Refuse Containers and Dumpsters

- Outdoor refuse containers and dumpsters owned and operated by the County shall be protected from stormwater and covered at all times.
- Outdoor refuse containers and dumpsters owned and operated by the County shall be managed so as to prevent the spilling, dumping, leaking, or otherwise discharge of liquids, semi-liquids, or solids from the containers.
- The use of temporary demolition containers, litter receptacles, and containers which hold large bulky items may be excluded from these standards.

Maintenance and Inspection

- Refer to the Sussex County Highway Agency Stormwater Permit Best Management Practices Guide for information on Maintenance and Inspection.
- Perform monthly inspections of all (indoor and outdoor if applicable) storage locations and maintenance yards.



Sussex County Standard Operating Procedures Spill Response

Spill Response BMP Objectives

- 1. Spill Prevention, Containment and Countermeasures
- 2. Pollution Control



Introduction and Purpose

This SOP contains the basic guidelines which can be applied in response to a spill.

Spill Classifications

Small: Generally, one (1) or less gallons discharged into the environment. Large: Generally, in excess of one (1) gallons. – Call Hazmat (973-940-5500), work to contain the product if it can be done safely.

Classes of Materials

- Hazardous Chemicals: acids, solvents, Reference the Right-to-Know / Safety Data Sheets for safety related data, employ appropriate PPE
- Petroleum: Petroleum Products (oils, gas, diesel, etc.)
- Solid: deicing chemicals
- Other Liquids: coolants, cutting fluids, oil-based paints and stains

Storage:

• Provide spill containment dikes or secondary containment around stored oils and other fluid storage drum(s). Or, use dual wall storage systems with periodic interstitial monitoring and written log of activities

Spill Response and Reporting – If a Spill Occurs

- Identify the materials and approximate amounts.
- Be aware of your surroundings, specifically, weather conditions, stormwater facilities, wind direction, and ground slope.
- Spills in excess of one (1) gallon or of a hazardous nature require notification of Hazmat (973-940-5500)
- Locate and open the Spill Kit. Proceed with basic small spill containment and cleanup.

- Most common spills encountered on county property would be petroleum products for which granular absorbents, oil absorbent pads, and universal absorbent pads can be used.
- The spread of spills can be contained using booms, drain protectors, and rolls.
- Conduct cleanups of any spills immediately after discovery.
- Spills are to be cleaned using dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (e.g., granular absorbent and absorbent pads) and the rest of the area is to be swept. These materials are readily available in the on-site spill kits.

Disposal Guidelines

• Package the waste for proper dispose, dry absorbents used to contain and clean small petroleum small spills can be bagged and disposed of in a trash receptacle or as directed by Hazmat.

Equipment Inspection & Kit Inspections

- On a monthly basis inspect Spill Response kits for functionality.
- Maintain a written log at the facility.
- Refer to the Sussex County Highway Agency Stormwater Permit Best Management Practices Guide for information on Maintenance and Inspection.

TO: All Garages

FROM: Ashley Havens

CC: Bill Koppenaal

DATE: April 23, 2019

SUBJECT: Annual NJPDES Certification Equipment and Materials Update

Attached you will find an equipment list and materials inventory for your facility. Please review this list and make adjustments as required. Use attached form for adding, deleting or changing any items.

For the Materials section; please enter what bulk items you store such as: Gasoline, Diesel Fuel and Kerosene. Also, what is stored in your Salt Shed

Please have updates completed and returned to me in the fax by Friday, April 26, 2019.

Do not hesitate to contact me with any questions.

Thank You:

Ashley Havens (973) 579-0430 ext: 1318

Reports and Logs

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887

Report Debris Activities - Summary Report

Between: 1/1/2018 *and* 12/31/2018

Month	Tons Collected
Jan	1.09
Feb	1.13
Mar	0.73
Apr	6.63
Мау	4.87
Jun	0.05
Jul	0.41
Aug	0.29
Sep	0.62
Oct	0.29
Nov	0.17
Dec	0.15
Report Total:	16.4

Litter Pick Up - Monthly by District - Date Range

All values in tons except as noted (NJDEP: 1.053 CY = 1 Ton)

Year: 2018					District				
Month:	Total	Andover	Frankford	Hopatcong	Lafayette	Layton	Stillwater	Sussex	Vernon
Jan	1.09			0.14	0.04	0.53	0.16		0.22
Feb	1.13		0.02	0.06	0.26	0.39	0.27		0.13
Mar	0.73					0.50			0.23
Apr	6.63	0.50	1.06	0.76	0.84	0.56	0.57	0.13	2.21
Мау	4.87	1.14	0.44	0.32	1.07		0.02	1.26	0.62
Jun	0.05							0.05	
Jul	0.41	0.34		0.07					
Aug	0.29	0.22						0.07	
Sep	0.62	0.31					0.31		
Oct	0.29	0.29							
Nov	0.17					0.17			
Dec	0.15					0.13		0.02	
Year Totals:	16.4	2.8	1.5	1.4	2.2	2.3	1.3	1.5	3.4
Report Totals:	16.4	2.8	1.5	1.4	2.2	2.3	1.3	1.5	3.4

Report Basin Activities - Summary Report

Between: 1/1/2018 *and* 12/31/2018

Month	Cubic Yards Collected	Basins Cleaned
Apr	10	105
May	186	83
Jun	11	60
Jul	22	110
Aug	17	107
Sep	12	53
Oct	3	2
Nov	2	2
Report Total	263	522

Report: Basin Cleaning - Monthly by District

All values in cubic yards except as noted (NJDEP: 1.053 CY = 1 Ton)

Year:	2018
-------	------

Month:	No Basins	Tons	Total	Andover	Frankford	Hopatcong	Lafayette	Layton	Stillwater	Sussex	Vernon
Apr	105	9.5	10					10			
May	83	176.6	186					6		180	
Jun	60	10.4	11					11			
Jul	110	20.9	22				0	8	14		
Aug	107	16.1	17		4			13			
Sep	53	11.4	12								12
Oct	2	2.8	3	3							
Nov	2	1.9	2								2
Totals:	522	249.8	263	3	4		0	48	14	180	14
Report T	otals: 522	249.8	263	3	4	0	0	48	14	180	14

Report Sweeping Activities - Summary Report

Between: 1/1/2018 *and* 12/31/2018

Month	Cubic Yards Collected
Jan	3
Feb	190
Mar	95
Apr	617
Мау	1149
Jun	535
Jul	550
Aug	255
Sep	61
Oct	62
Nov	24
Dec	17
Report Tota	<i>d</i> : 3558

Stormwater BMP Device Maintenance Log

(Infiltration Pond, Detention Basin, Vortex Chamber, etc.)

Distric	t: Lafay	ette				
Device:	613_3.79	_Lafayette			Clean	ing Data
CR	MP	Work Date	Task	-	Tons	Disposal
613	3.79	8/7/2018	General Cleaning		16.875	Yard
Device:	613_4.68	_Lafayette			Clean	ing Data
CR	MP	Work Date	Task	-	Tons	Disposal
613	4.68	8/7/2018	General Cleaning		16.875	Yard
613	4.68	3/15/2018	General Cleaning		13.5	Yard
Device:	613_5.35	_Lafayette			Clean	ing Data
CR	MP	Work Date	Task	-	Tons	Disposal
613	5.35	7/25/2018	General Cleaning		0	9
613	5.35	3/15/2018	General Cleaning		33.75	Yard
Device:	613_5.96	_Lafayette			Clean	ing Data
CR	MP	Work Date	Task	-	Tons	Disposal
613	5.96	7/24/2018	General Cleaning		13.5	Yard
613	5.96	3/15/2018	General Cleaning			Yard
613	5.96	3/15/2018	General Cleaning		10.125	Yard
				District Totals:	23.62	25
					Tons	s:
				Report Totals:	23	.625

Distric	t:							
CR				Outi	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
0		-	[_]					
CR 517	7			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
23.3	Ν	517N2330	FES	15	LOW AREA			
33.455	S	517S33455	DAYLIGHT	18	WETLANDS			
CR 519)			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
6	Ν	519N6.0	DAYLIGHT	18	WETLANDS			
36.85	S	519S36.85	DAYLIGHT	12	LOW AREA			
CR 613	3			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
34.52	S	613S34.52	DAYLIGHT	15	SURFACE WATER			
CR 621	1			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0		6210.0	HEADWALL	48	WETLANDS			

Distric	t: Ai	ndover						
C R 51	7			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
22.93	Ν	517N22.93	HEADWALL	18	SWALE			
23.24	Ν	517N23.24	DAYLIGHT	18	LOW AREA			
24.28	Ν	517N24.28	DAYLIGHT	15	LOW AREA			
24.32	Ν	517N24.32	UNKNOWN	15	LOW AREA			
24.48	Ν	517N24.48	DAYLIGHT	18	LOW AREA			
24.5	Ν	517N24.50	DAYLIGHT	18	LOW AREA			
24.68	Ν	517N24.68	DAYLIGHT	24	SURFACE WATER			
25.33	S	517S25.33	DAYLIGHT	15	WETLANDS			
25.42	S	517S25.42	DAYLIGHT	15	WETLANDS			
25.59	S	517S25.59	DAYLIGHT	24	SURFACE WATER			
25.6	S	517S25.60	DAYLIGHT	24	SURFACE WATER			
25.62	S	517S25.62	DAYLIGHT	15	SURFACE WATER			
25.75	S	517S25.75	DAYLIGHT	18	SURFACE WATER			
25.77	S	517S25.77	DAYLIGHT	18	SURFACE WATER			
26.13	S	517S26.13	DAYLIGHT	15	LOW AREA			
26.17	S	517S26.17	DAYLIGHT	15	LOW AREA			
26.33	S	517S26.33	ABUTMENT Wall	15	SWALE			
26.38	S	517S26.38	DAYLIGHT	15	LOW AREA			
26.63	S	517S26.63	DAYLIGHT	15	LOW AREA			
26.7	N	517N26.70	HEADWALL	15	SWALE			
26.84	S	517S26.84	DAYLIGHT	15	WETLANDS			
26.87	Ν	517N26.87	DAYLIGHT	15	LOW AREA			
27.95	S	517S27.95	ABUTMENT Wall	24	SWALE			
28.18	S	517S28.18	ABUTMENT Wall	15	WETLANDS			
28.31	S	517S28.31	DAYLIGHT	15	SWALE			
28.46	N	517N28.46	DAYLIGHT	15	SWALE			
28.64	Ν	517N28.64	DAYLIGHT	15	SWALE			
28.64	S	517S28.64	DAYLIGHT	15	SURFACE WATER			
28.94	S	517S28.94	ABUTMENT Wall	15	SWALE			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 2 of 56

Distric	t: A	ndover					7
29.2	Ν	517N29.20	DAYLIGHT	15	SURFACE WATER		
29.35	Ν	517N29.35	DAYLIGHT	15	SWALE		
29.45	Ν	517N29.45	DAYLIGHT	15	SWALE		
29.51	Ν	517N29.51	DAYLIGHT	15	WETLANDS		
29.58	Ν	517N29.58	DAYLIGHT	15	SWALE		
29.69	Ν	517N29.69	DAYLIGHT	15	SWALE		
29.76	S	517S29.76	DAYLIGHT	15	SWALE		
29.96	Ν	517N29.96	DAYLIGHT	15	WETLANDS		
30.09	Ν	517N30.09	DAYLIGHT	15	LOW AREA		
30.19	Ν	517N30.19	DAYLIGHT	15	SWALE		
30.26	Ν	517N30.26	DAYLIGHT	15	LOW AREA		
30.43	Ν	517N30.43	DAYLIGHT	15	SWALE		
30.48	Ν	517N30.48	DAYLIGHT	15	SWALE		
30.58	Ν	517N30.58	DAYLIGHT	18	LOW AREA		
30.7	S	517S30.70	DAYLIGHT	15	LOW AREA		
30.96	Ν	517N30.96	DAYLIGHT	15	WETLANDS		
31.46	S	517S31.46	DAYLIGHT	24	WETLANDS		
31.59	S	517S31.59	DAYLIGHT	12	SURFACE WATER		
31.65	S	517S31.65	DAYLIGHT	15	SURFACE WATER		
31.67	Ν	517N31.67	UNKNOWN	24	SURFACE WATER		
31.71	Ν	517N31.71	HEADWALL	12	LOW AREA		
32.22	S	517S32.22	HEADWALL	36	WETLANDS		
32.38	S	517S32.38	UNKNOWN	10	SURFACE WATER		
32.55	S	517S32.55	UNKNOWN	24	WETLANDS		

R 51	9			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
57.47	S	519S57.47	DAYLIGHT	18	WETLANDS			
57.9	Ν	519N57.90	DAYLIGHT	18	WETLANDS	\checkmark		
58.11	Ν	519N58.11	DAYLIGHT	15	SWALE			
58.26	Ν	519N58.26	DAYLIGHT	12	WETLANDS			
58.57	Ν	519N58.57	DAYLIGHT	15	LOW AREA			
58.72	S	519S58.72	DAYLIGHT	12	LOW AREA			
59.37	Ν	519N59.37	DAYLIGHT	18	WETLANDS			
59.47	Ν	519N59.47	DAYLIGHT	15	WETLANDS			
59.55	Ν	519N59.55	DAYLIGHT	18	SURFACE WATER			
59.86	Ν	519N59.86	DAYLIGHT	18	LOW AREA			
60.07	Ν	519N60.07	DAYLIGHT	18	WETLANDS			
60.15	S	519S60.15	HEADWALL	15	SURFACE WATER			
60.16	S	519S60.16	DAYLIGHT	18	SURFACE WATER			
60.7	Ν	519N60.70	DAYLIGHT	18	WETLANDS			
60.74	Ν	519N60.74	DAYLIGHT	18	WETLANDS			
60.86	Ν	519N60.86	DAYLIGHT	18	WETLANDS			
61.09	Ν	519N61.09	FES	18	WETLANDS			
51.39	Ν	519N61.39	DAYLIGHT	18	SWALE			
61.72	Ν	519N61.72	DAYLIGHT	18	WETLANDS			
61.9	Ν	519N61.90	DAYLIGHT	18	WETLANDS			
62.12	S	519S62.12	DAYLIGHT	24	WETLANDS			
62.35	Ν	519N62.35	DAYLIGHT	12	WETLANDS			
63.96	S	519S63.96	DAYLIGHT	18	LOW AREA			
64.14	Ν	519N64.14	ABUTMENT Wall	12	LOW AREA			
64.54	N	519N64.54	OTHER	15	SCOUR HOLE & SW			
64.72	N	519N64.72	DAYLIGHT	18	SWALE			

1

Distrio	ct: Ai	ndover						
CR 60	3			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Drain Cleaned	
0.83	S	603S0.83	DAYLIGHT	15	LOW AREA			
1.4	S	603S1.40	DAYLIGHT	15	LOW AREA			
1.6	Ν	603N1.60	DAYLIGHT	15	LOW AREA			
2.2		6032.20	UNKNOWN	15	NEAR SURFACE WA			
2.4	Ν	603N2.40	DAYLIGHT	15	NEAR SURFACE WA			
3.8	S	603S3.8	DAYLIGHT	15	SWALE			
CR 60	R 606		Outfall Data		Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.59	Е	606E0.59	DAYLIGHT	15	LOW AREA			
0.65	Е	606E0.65	DAYLIGHT	21	LOW AREA			
0.79	Е	606E0.79	OTHER	15	SWALE			
CR 60	8			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.6	Е	608E0.60	DAYLIGHT	18	LOW AREA			
0.82	W	608W0.82	UNKNOWN	15	LOW AREA			

Distric	ct: A	ndover						
C R 61	1			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.27	Ν	611N0.27	DAYLIGHT	15	LOW AREA			
1.02	S	611S1.02	WINGWALL	15	LOW AREA			
1.3	S	611S1.30	DAYLIGHT	18	LOW AREA			
2.35	S	611S2.35	DAYLIGHT	15	LOW AREA			
2.4	S	611S2.40	OTHER	15	SURFACE WATER			
3.7	S	611S3.70	DAYLIGHT	15	LOW AREA			
3.95	S	611S3.95	UNKNOWN	15	LOW AREA			
5.05	S	611S5.05	DAYLIGHT	18	LOW AREA			
5.1	S	611S5.10	DAYLIGHT	15	LOW AREA			
5.3	S	611S5.30	DAYLIGHT	18	SWALE			
5.35	S	611S5.35	DAYLIGHT	15	SWALE			
5.51	S	611S5.51	DAYLIGHT	15	LOW AREA			
5.6	S	611S5.60	DAYLIGHT	15	LOW AREA			
5.68	S	611S5.68	DAYLIGHT	15	LOW AREA			
5.75	S	611S5.75	DAYLIGHT	15	LOW AREA			
5.91	S	611S5.91	DAYLIGHT	15	LOW AREA			\checkmark
6.05	S	611S6.05	DAYLIGHT	15	LOW AREA			
6.35	S	611S6.35	UNKNOWN	15	LOW AREA			

C R 61	3							
	5			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0	Ν	613N0.00	DAYLIGHT	15	SWALE			
0.35	S	613S0.35	HEADWALL	15	SWALE			
0.42	Ν	613N0.42	DAYLIGHT	15	WETLANDS			
0.59	S	613S0.59	DAYLIGHT	15	WETLANDS			
0.79	S	613S0.79	DAYLIGHT	15	LOW AREA			
0.88	S	613S0.88	DAYLIGHT	15	SURFACE WATER			
0.94	S	613S0.94	DAYLIGHT	15	SURFACE WATER			
0.96	S	613S0.96	DAYLIGHT	15	SURFACE WATER			
1.21	S	613S1.21	DAYLIGHT	15	LOW AREA			
1.67	S	613S1.67	DAYLIGHT	18	SWALE			
1.89	S	613S1.89	DAYLIGHT	15	SWALE			
1.94	S	613S1.94	DAYLIGHT	15	LOW AREA			
2	S	613S2.00	DAYLIGHT	15	LOW AREA			
2.18	S	613S2.18	DAYLIGHT	15	LOW AREA			
2.27	S	613S2.27	DAYLIGHT	15	SWALE			
2.33	S	613S2.33	DAYLIGHT	15	WETLANDS			
3.44	S	613S3.44	DAYLIGHT	15	LOW AREA			
R 61	8			Outi	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
1 65	F	618F1 65	UNKNOWN	15	LOW AREA			

				Unij	un Dun	C1055	1 vecus	Treeus
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.65	Е	618E1.65	UNKNOWN	15	LOW AREA			
1.75	Е	618E1.75	DAYLIGHT	15	LOW AREA			
1.8	Е	618E1.80	DAYLIGHT	15	NEAR SURFACE WA			
1.9	Е	618E1.90	DAYLIGHT	15	LOW AREA			
1.91	Е	618E1.91	DAYLIGHT	18	LOW AREA			
2.3	Е	618E2.30	DAYLIGHT	18	SWALE			
2.59	W	618W2.59	UNKNOWN	15	SWALE			

Distrie	ct: Ai	ndover						
C R 66	9			Out	Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.15	Ν	669N.15	DAYLIGHT	18	NEAR SURFACE WA			
0.15	S	669S.15	WINGWALL	42	NEAR SURFACE WA			
0.85	S	669S.85	DAYLIGHT	12	LOW AREA			
0.9	S	669S.90	DAYLIGHT	18	LOW AREA			
3.1	S	669S3.1	HEADWALL	15	NEAR SURFACE WA			
3.4	0	669N3.40	HEADWALL	15	SURFACE WATER	\checkmark		
3.5	S	669S3.5	DAYLIGHT	24	LOW AREA			

District: Frankford

CR 519	,			Out f	all Data	Cross		Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
65.22	Ν	519N65.22	DAYLIGHT	15	SURFACE WATER			
65.22	Ν	519N65.22	ABUTMENT Wall	18	SURFACE WATER			\checkmark
65.35	Ν	519N65.35	DAYLIGHT	30	WETLANDS	\checkmark		
65.35	Ν	519N65.35	DAYLIGHT	30	WETLANDS	\checkmark		
65.35	S	519S65.35						\checkmark
65.72	Ν	519N65.72	ABUTMENT Wall	18	SWALE			
66.05	Ν	519N66.05	DAYLIGHT	21	WETLANDS			
66.5	Ν	519N66.50	ABUTMENT Wall	18	LOW AREA			
66.95	S	519S66.95	ABUTMENT Wall	18	SWALE			
67.32	Ν	519N67.32	HEADWALL	42	SURFACE WATER			
68.4	Ν	519N68.40	DAYLIGHT	18	WETLANDS	\checkmark		
68.91	Ν	519N68.91	UNKNOWN	15	WETLANDS			
68.91	S	519S68.91	DAYLIGHT	18	SURFACE WATER		\checkmark	
69.03	Ν	519N69.03	HEADWALL	18	WETLANDS			
69.15	Ν	519N69.15	UNKNOWN	15	WETLANDS			
69.31	Ν	519N69.31	HEADWALL	15	SWALE			
69.7	Ν	519N69.70	WINGWALL	18	SURFACE WATER			
70.07	Ν	519N70.07	DAYLIGHT	18	WETLANDS			
70.62	Ν	519N70.62	WINGWALL	15	SURFACE WATER			
70.91	Ν	519N70.91	HEADWALL	15	LOW AREA			
71.08	Ν	519N71.08	DAYLIGHT	12	LOW AREA			
71.111	Ν	519N71.11	DAYLIGHT	15	LOW AREA			
71.57	Ν	519N71.57	DAYLIGHT	15	WETLANDS			
72.32	S	519S72.32	DAYLIGHT	30	SURFACE WATER			
72.37	S	519S72.37	WINGWALL	15	SURFACE WATER			
72.39	S	519S72.39	DAYLIGHT	18	NEAR SURFACE WA			
72.46	S	519S72.46	DAYLIGHT	18	NEAR SURFACE WA			
72.53	S	519S72.53	HEADWALL	18	SURFACE WATER			
72.55	S	519S72.55	DAYLIGHT	21	NEAR SURFACE WA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 9 of 56

Distric	t: F	rankford					
72.727	S	519S72.72	DAYLIGHT	15	NEAR SURFACE WA		
72.76	S	519S72.76	HEADWALL	15	SURFACE WATER		
72.85	S	519S72.85	ABUTMENT Wall	15	SURFACE WATER		
72.9	S	519S72.90	DAYLIGHT	15	LOW AREA		
73.09	S	519873.09	DAYLIGHT	18	LOW AREA		
73.16	S	519S73.16	DAYLIGHT	15	SWALE		
73.6	S	519S73.6	DAYLIGHT	18	LOW AREA		
74.25	Ν	519N74.25	DAYLIGHT	18	LOW AREA		
74.35	Ν	519N74.35	DAYLIGHT	15	LOW AREA		
74.67	S	519S74.67	DAYLIGHT	12	WETLANDS		
74.86	Ν	519N74.86	DAYLIGHT	15	LOW AREA		
75.04	Ν	519N75.04	DAYLIGHT	15	WETLANDS		
75.08	Ν	519N75.08	DAYLIGHT	12	WETLANDS		
75.1	Ν	519N75.1	DAYLIGHT	15	LOW AREA		
75.25	S	519S75.25	DAYLIGHT	15	NEAR SURFACE WA		
75.4	S	519S75.4	DAYLIGHT	15	LOW AREA		
75.45	S	519S75.45	DAYLIGHT	15	LOW AREA		
75.5	S	519875.5	DAYLIGHT	12	LOW AREA		
75.79	0	519N75.79	DAYLIGHT	15	LOW AREA		
77.01	Ν	519N77.01	DAYLIGHT	18	SURFACE WATER		
77.65	Ν	519N77.65	DAYLIGHT	30	SURFACE WATER	\checkmark	
77.78	Ν	519N77.78	DAYLIGHT	21	SWALE		

District: Frankford

CR 52	1			Outi	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
	S	521S222.8	DAYLIGHT	18	WETLANDS			
19.7	Ν	521N19.7	DAYLIGHT	15	SWALE			
19.74	Ν	521N19.74	DAYLIGHT	24	SWALE			
20.51	Ν	521N20.51	DAYLIGHT	15	WETLANDS			
22.6	Ν	521N226.0	DAYLIGHT	15	SWALE			
22.66	Ν	521N2266.	DAYLIGHT	15	SWALE			
23.8	Ν	521N23.8	WINGWALL	48	SWALE			
23.8	Ν	521N23.8	OTHER	48	SWALE			
23.8	Ν	521N23.8	HEADWALL	18	WETLANDS			
23.8	S	521S23.8	HEADWALL	24	WETLANDS			
23.8	S	521S23.8	DAYLIGHT	48	SWALE			
23.97	S	521S23.97	DAYLIGHT	18	SURFACE WATER			
23.99	Ν	521N23.99	DAYLIGHT	24	SCOUR HOLE & SW			
25.56	Ν	521N25.56	DAYLIGHT	15	SWALE		\checkmark	\checkmark
25.98	Ν	521N2255.	DAYLIGHT	15	LOW AREA			
26.06	Ν	521N26.06	DAYLIGHT	24	SCOUR HOLE & SW			
26.25	Ν	521N2266.	DAYLIGHT	15	LOW AREA			
26.36	Ν	521N26.36	DAYLIGHT	18	WETLANDS			
26.48	Ν	521N266.4	DAYLIGHT	15	WETLANDS			
26.5	Ν	521N26.5	DAYLIGHT	15	WETLANDS			
26.53	Ν	521N26.53	DAYLIGHT	15	WETLANDS			
26.62	0	521N26.62	DAYLIGHT	15	WETLANDS			
26.91	Ν	521N26.91	DAYLIGHT	15	WETLANDS			

District: Frankford

C R 62	6			Outf	Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain		
0.5	W	626W0.5	DAYLIGHT	15	LOW AREA			
0.55	W	626W0.55	DAYLIGHT	15	LOW AREA			
0.83	W	626W0.83	DAYLIGHT	15	LOW AREA			
1.49	W	626W1.49	DAYLIGHT	15	LOW AREA			
1.82	E	626E1.82	DAYLIGHT	24	SURFACE WATER			
1.83	E	626E1.83	DAYLIGHT	24	SURFACE WATER			
1.91	E	626E1.91	DAYLIGHT	15	NEAR SURFACE WA			
2.2	E	626E2.20	DAYLIGHT	15	SWALE			
2.3	Е	626E2.30	DAYLIGHT	15	NEAR SURFACE WA			
3.05	Е	626E3.05	UNKNOWN	15	LOW AREA			
3.25	W	626W3.25	DAYLIGHT	18	SWALE			
3.3	W	626W3.30	DAYLIGHT	15	LOW AREA			

CR 629

C R 622	,			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.63	Ν	629N0.63	DAYLIGHT	15	LOW AREA			
0.77	Ν	629N0.77	DAYLIGHT	18	SURFACE WATER			
1.81	Ν	629N1.81	DAYLIGHT	15	SURFACE WATER			
1.82	Ν	629N1.82	DAYLIGHT	15	SURFACE WATER			
2.09	Ν	629N2.09	DAYLIGHT	12	SURFACE WATER			
2.4	Ν	629N2.4	DAYLIGHT	15	LOW AREA			
2.61	S	629S2.61	DAYLIGHT	15	LOW AREA			
3.65	Ν	629N3.65	DAYLIGHT	12	LOW AREA			
3.75	Ν	629N3.75	DAYLIGHT	15	LOW AREA			
4.1	Ν	629N4.10	DAYLIGHT	15	SWALE			
4.12	Ν	629N4.12	DAYLIGHT	15	SWALE			
4.25	Ν	629N4.25	DAYLIGHT	18	LOW AREA			
4.3	Ν	629N4.30	DAYLIGHT	18	LOW AREA			
4.75	S	629S4.75	FES	15	LOW AREA			
4.95	S	629S4.95	OTHER	24	LOW AREA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 12 of 56

Distric	ct: Fr	ankford						
CR 63	0			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.16	W	630W0.16	UNKNOWN	24	WETLANDS			
0.64	W	630W0.64	FES	18	SWALE			
0.67	W	630W.67	DAYLIGHT	18	WETLANDS			
1.06	Е	630E1.06	DAYLIGHT	15	SWALE			
1.78	Е	630E1.78	UNKNOWN	15	LOW AREA			
2.53	W	630W2.53	WINGWALL	15	SURFACE WATER			
2.53	W	630W2.53	WINGWALL	15	SURFACE WATER			
CR 63. MM			End Stula		all Data	Cross Drain	Needs Cleaned	Needs Repair
	Dir	<i>Outfall ID</i> 633N.08	End Style	Size			Cieuneu	Керин
0.08	N			15	WETLANDS			
0.14	Ν	633N.14	DAYLIGHT	18	SWALE			
0.38	Ν	633N.38	DAYLIGHT	15	SWALE			
0.58	Ν	633N.58	UNKNOWN	15	SWALE			
0.76	S	633S.76	DAYLIGHT	18	WETLANDS			
1.61	Ν	633N1.61	DAYLIGHT	12	SWALE			
2.22	Ν	633N2.22	HEADWALL	15	WETLANDS			
2.57	Ν	633N2.57	DAYLIGHT	15	WETLANDS			
2.63	Ν	633N2.63	DAYLIGHT	15	SWALE			
3	Ν	633N3.0	DAYLIGHT	18	SWALE			
3.03	Ν	633N3.03	DAYLIGHT	15	SWALE			
3.633	S	633S3.633	UNKNOWN	24	SURFACE WATER			
CR 63.	5				all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair

				Outfall Data		Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.19	Ν	635N0.19	DAYLIGHT	18	LOW AREA			
0.25	Ν	635N0.25	DAYLIGHT	15	LOW AREA			
0.7	Ν	635N0.7	DAYLIGHT	18	SWALE			
1	Ν	635N1.0	DAYLIGHT	8	SURFACE WATER			
1.3	S	635S1.3	DAYLIGHT	15	SCOUR HOLE			

Printed:Tuesday, April 23, 2019Sussex County Division of Public Works

Developed February 2007 Page 13 of 56

District: Frankford

CR 63	6			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.1	W	636W0.1	DAYLIGHT	18	SWALE			
0.45	Е	636E0.45	HEADWALL	18	LOW AREA			
0.52	Е	636E0.52	UNKNOWN	15	SWALE			
0.71	Е	636E0.71	DAYLIGHT	18	LOW AREA			
0.75	Е	636E0.75	HEADWALL	12	LOW AREA			
0.8	E	636E0.8	DAYLIGHT	12	SWALE			
0.82	E	636E0.82	HEADWALL	12	LOW AREA			
0.98	Е	636E0.98	HEADWALL	24	LOW AREA			
1.1	Е	636E1.10	DAYLIGHT	15	LOW AREA			
1.12	Е	636E1.12	DAYLIGHT	15	SWALE			
1.31	Е	636E1.31	HEADWALL	18	LOW AREA			
1.6	Е	636E1.60	UNKNOWN	21	SWALE		\checkmark	
1.9	Е	636E1.90	DAYLIGHT	21	LOW AREA			
2	Е	636E2.00	DAYLIGHT	18	SWALE			
2.55	W	636W2.55	DAYLIGHT	15	NEAR SURFACE WA			
2.75	Е	636E2.75	DAYLIGHT	15	LOW AREA			
2.8	Е	636E2.80	DAYLIGHT	15	LOW AREA			
2.84	Е	636E2.84	DAYLIGHT	18	SWALE			
3	Е	636E3.00	DAYLIGHT	15	NEAR SURFACE WA			
3.1	Е	636E3.10	DAYLIGHT	42	SURFACE WATER			
3.22	E	636E3.22	DAYLIGHT	18	WETLANDS			

Distrio	ct: Fr	rankford						
CR 655				Outfall Data		Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1	Ν	655N1.0	DAYLIGHT	18	LOW AREA			
1.1	Ν	655N1.1	DAYLIGHT	18	SURFACE WATER			
1.15	Ν	655N1.15	HEADWALL	18	SURFACE WATER			
1.44	S	655S1.44	DAYLIGHT	18	WETLANDS			
1.7	Ν	655N1.70	HEADWALL	15	SWALE			
1.91	Ν	655N1.91	DAYLIGHT	18	WETLANDS			
2.35	S	655S2.35	DAYLIGHT	18	SWALE			
2.766	Ν	655N2.766	DAYLIGHT	18	SWALE			

Distrie	ct: Fr	ankfrod						
CR 521			Outfall Data		Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
	Ν	521N57.9	DAYLIGHT	15	IN BANK, TOE			\checkmark

District: Hopatcong

CR 60.	2			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0	S	602S0.0	HEADWALL	18	SURFACE WATER			
0.46	S	602S.46	DAYLIGHT	24	WETLANDS			
0.85	W	602W.85	UNKNOWN	18	SWALE			
0.93	Е	602E.93	DAYLIGHT	18	SWALE			
0.97	W	602W.97	DAYLIGHT	18	SWALE			
1.15	Е	602E1.15	DAYLIGHT	18	SWALE			
1.4	W	602W1.4	UNKNOWN	24	WETLANDS			
1.74	E	602E1.74	FES	18	WETLANDS			
2.15	E	602E2.15	DAYLIGHT	15	SWALE			
2.29	E	602N2.29	DAYLIGHT	18	SURFACE WATER			
2.38	E	602E2.38	UNKNOWN	18	SURFACE WATER			
2.599	Е	602E2.599	HEADWALL	15	SWALE			

District: Hopatcong

CR 604	4			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
5.3	Е	604E5.30	DAYLIGHT	18	SWALE			
5.35	Е	604E5.35	WINGWALL	15	NEAR SURFACE WA			
5.7	Е	604E5.70	WINGWALL	15	NEAR SURFACE WA			
5.75	W	604W5.75	UNKNOWN	15	LOW AREA			
5.8	0	604W5.80	FES	18	LOW AREA			
6.04	E	604E6.04	WINGWALL	15	LOW AREA			
6.05	W	604W6.05	WINGWALL	21	LOW AREA			
6.12	W	604W6.12	DAYLIGHT	15	LOW AREA			
6.2	Е	604E6.20	FES	10	NEAR SURFACE WA			
6.41	Е	604E6.41	DAYLIGHT	15	LOW AREA			
6.5	Е	604E6.50	DAYLIGHT	15	LOW AREA			
6.66	Е	604E6.66	UNKNOWN	15	LOW AREA			
7	Е	604E7.00	DAYLIGHT	15	LOW AREA			
7.1	Е	604E7.10	DAYLIGHT	15	LOW AREA			
7.42	Е	604E7.42	DAYLIGHT	15	SWALE			
7.78	W	604W7.78	FES	15	LOW AREA			
7.95	W	604W7.95	DAYLIGHT	15	SWALE			
8.1	W	604W8.10	DAYLIGHT	18	LOW AREA			

District: Hopatcong

CR 60	5			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.39	Ν	605N.39	DAYLIGHT	15	SWALE			
0.4	Ν	605N.40	DAYLIGHT	15	SWALE			
0.54	S	605S.54	DAYLIGHT	15	SWALE			
1.1	S	605S1.1	UNKNOWN	15	LOW AREA			
1.93	Ν	605N1.93	DAYLIGHT	18	WETLANDS			
1.97	Ν	605N1.97	DAYLIGHT	18	WETLANDS			
2	S	605S2.0	DAYLIGHT	15	LOW AREA			
2.11	S	605S2.11	DAYLIGHT	18	WETLANDS			
2.89	S	605S2.89	DAYLIGHT	24	SCOUR HOLE			
3	Ν	605N3.0	UNKNOWN	15	SWALE			
3.22	Ν	605N3.22	DAYLIGHT	15	SWALE			
4.2	0	605N4.2	OTHER	15	WETLANDS			

District: Hopatcong

C R 60	/			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0	S	607S0.0	DAYLIGHT	18	HEADWALL			
0.15	Ν	607N.15	DAYLIGHT	15	SWALE			
0.78	S	607S.78	DAYLIGHT	18	SWALE		\checkmark	
0.98	S	607S.98	DAYLIGHT	12	SWALE			
1.25	S	607S1.25	DAYLIGHT	18	SURFACE WATER			
1.34	Ν	607N1.34	DAYLIGHT	15	WETLANDS			
1.55	S	607S1.55	DAYLIGHT	15	SURFACE WATER			
1.75	S	607S1.75	DAYLIGHT	15	SURFACE WATER			
1.78	S	607S1.78	DAYLIGHT	15	SURFACE WATER			
1.89	S	607S1.89	UNKNOWN	15	SURFACE WATER			
2.02	S	607S2.02	DAYLIGHT	15	SURFACE WATER		\checkmark	
2.11	S	607S2.11	DAYLIGHT	15	SURFACE WATER			
2.13	S	607S2.13	DAYLIGHT	15	SURFACE WATER			
2.44	S	607S2.44	DAYLIGHT	15	SURFACE WATER			
2.77	S	607S2.77	DAYLIGHT	18	SURFACE WATER			
2.87	S	607S2.87	DAYLIGHT	18	SWALE			
3.01	S	607S3.01	HEADWALL	36	SWALE		\checkmark	
3.49	Ν	607N3.49	DAYLIGHT	15	SWALE			
3.6	S	607S3.60	DAYLIGHT	15	WETLANDS			
3.68	S	607S3.68	DAYLIGHT	24	SURFACE WATER			
4.1	S	607S4.1	HEADWALL	12	SWALE			
4.19	S	607S4.19	HEADWALL	12	SWALE			
4.255	S	607S4.255	HEADWALL	15	SWALE			
4.47	Ν	607N4.47	HEADWALL	12	SWALE			
4.61	Ν	607N4.61	DAYLIGHT	24	SURFACE WATER		\checkmark	
4.61	S	607S4.61	DAYLIGHT	12	WETLANDS			
5.37	Ν	607N5.37	DAYLIGHT	18	SURFACE WATER			
5.97	Ν	607N5.97	UNKNOWN	15	SWALE			
6.02	N	607N6.02	DAYLIGHT	15	SURFACE WATER			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 20 of 56

Distric	ct: H	opatcong					
6.49	Ν	607N6.49	HEADWALL	30	SWALE		
6.79	Ν	607N6.79	DAYLIGHT	15	SWALE		
6.98	S	607S6.98	DAYLIGHT	15	SWALE		
8.34	S	607S8.34	HEADWALL	18	SURFACE WATER		
8.78	Ν	607N8.78	HEADWALL	24	SWALE		

CR 609

CII 002				Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.25	Ν	609N.25	DAYLIGHT	15	SWALE			
0.33	S	609S.33	DAYLIGHT	15	SWALE			
0.52	S	609S.52	HEADWALL	15	SWALE			
0.56	S	609S.56	UNKNOWN	15	SWALE			
0.63	S	609S.63	UNKNOWN	15	SWALE			
0.8	S	609S.80	HEADWALL	24	SWALE			
1.26	S	609S1.26	HEADWALL	18	SWALE			
1.3	S	609S1.30	DAYLIGHT	18	SWALE			

CR 671

CR 67	1			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.18	S	671S0.18	FES	15	SWALE			
0.25	S	671S0.25	FES	15	SWALE			
0.6	S	671S0.60	FES	15	LOW AREA			
0.9	Ν	671N0.90	FES	15	LOW AREA			
1	S	671S1.00	DAYLIGHT	21	SWALE			
1.05	S	671S1.05	DAYLIGHT	18	LOW AREA			
1.4	Ν	671N1.40	FES	18	SWALE			
1.45	Ν	671N1.45	FES	15	LOW AREA			
1.7	S	671S1.70	FES	15	LOW AREA			
1.75	S	671S1.75	FES	15	LOW AREA			
1.8	S	671S1.80	UNKNOWN	15	NEAR SURFACE WA			
1.87	S	671S1.87	FES	15	NEAR SURFACE WA			

istric	t: La	afayette						
R 51	7			Out	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
32.75	S	517S32.75	OTHER	48	SURFACE WATER			
32.83	S	517S32.83	DAYLIGHT	24	SURFACE WATER			
33.08	Ν	517N33.08	ABUTMENT Wall	15	SWALE			
33.1	Ν	517N33.10	UNKNOWN	15	SWALE			
33.32	Ν	517N33.32	OTHER	48	SURFACE WATER			
33.7	S	517S33.70	DAYLIGHT	18	WETLANDS			
33.89	S	517S33.89	DAYLIGHT	18	WETLANDS			
33.99	Ν	517N33.99	UNKNOWN	18	SWALE			
34.37	Ν	517N34.37	UNKNOWN	15	SWALE			
34.55	Ν	517N34.55	UNKNOWN	15	LOW AREA			
35.01	S	517S35.01	DAYLIGHT	15	NEAR SURFACE WA			
35.85	Ν	517N35.85	HEADWALL	30	LOW AREA			
36.09	S	517S36.09	OTHER	18	SCOUR HOLE			
36.3	Ν	517N36.3	DAYLIGHT	12	LOW AREA			
36.5	0	517N36.5	DAYLIGHT	15	SCOUR HOLE			
37.06	S	517S37.06	DAYLIGHT	21	LOW AREA			
37.09	S	517S37.09	DAYLIGHT	21	LOW AREA			
37.5	S	517S37.5	DAYLIGHT	18	LOW AREA			
37.53	S	517S37.53	DAYLIGHT	21	SWALE			
37.54	S	517S37.54	DAYLIGHT	21	SWALE			
37.63	S	517S37.63	DAYLIGHT	15	LOW AREA			
37.87	S	517S37.87	DAYLIGHT	18	LOW AREA			
37.92	S	517S37.92	DAYLIGHT	36	LOW AREA			
38.4	S	517S38.4	DAYLIGHT	36	SWALE			
39.22	S	517S39.22	HEADWALL	30	LOW AREA			
39.23	Ν	517N39.23	DAYLIGHT	18	SWALE			
39.24	Ν	517N39.24	HEADWALL	30	SWALE			
39.33	Ν	517N39.33	HEADWALL	15	LOW AREA			
39.78	S	517S39.78	DAYLIGHT	15	LOW AREA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 22 of 56

Distric	t: L	afayette					
39.82	S	517S39.82	DAYLIGHT	15	LOW AREA		
40.05	Ν	517N40.05	HEADWALL	36	LOW AREA		

istrio	:t: La	afayette						
R 61.	3			Out	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
3.61	S	613S3.61	DAYLIGHT	15	SURFACE WATER			
3.78	S	613S3.78	ABUTMENT Wall	48	SURFACE WATER	\checkmark		
3.84	S	613S3.84	DAYLIGHT	48	SURFACE WATER			
4.49	S	613S4.49	UNKNOWN	12	SWALE			
1.5	S	613S4.50	ABUTMENT Wall	15	SURFACE WATER			
1.57	S	613S4.57	HEADWALL	18	SWALE			
1.68	Ν	613N4.68	HEADWALL	48	SURFACE WATER			
1.78	S	613S4.78	HEADWALL	48	SURFACE WATER			\checkmark
5.18	S	613S5.18	ABUTMENT Wall	24	SWALE			
5.2	S	613S5.20	FES	36	SURFACE WATER			
5.25	S	613S5.25	ABUTMENT Wall	24	SWALE			
5.3	S	613S5.30	HEADWALL	48	SURFACE WATER			
5.3	S	613S5.3	ABUTMENT Wall	48	SWALE			
5.35	S	613S5.35	ABUTMENT Wall	15	SWALE			
5.41	Ν	613N5.41	ABUTMENT Wall	15	SWALE			
5.48	S	613S5.48	DAYLIGHT	15	SWALE			
5.51	S	613S5.51	DAYLIGHT	15	SURFACE WATER			
5.56	S	613S5.56	DAYLIGHT	15	SURFACE WATER			
5.6	Ν	613N5.60	ABUTMENT Wall	24	SURFACE WATER			
5.6	S	613S5.60	DAYLIGHT	15	SURFACE WATER			
5.66	S	613S5.66	DAYLIGHT	12	SURFACE WATER			
5.855	S	613S5.855	HEADWALL	48	SURFACE WATER			\checkmark
6.1	S	613S6.1	DAYLIGHT	15	SURFACE WATER			
6.3	S	613S6.30	DAYLIGHT	24	SURFACE WATER			
5.32	S	613S6.32	DAYLIGHT	15	SWALE		\checkmark	
6.37	S	613S6.37	DAYLIGHT	32	SURFACE WATER			
6.58	S	613S6.58	DAYLIGHT	18	SURFACE WATER			
6.71	S	613S6.71	HEADWALL	18	SURFACE WATER			
7	S	613S7.0	UNKNOWN	36	SURFACE WATER			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 24 of 56

Distrie	ct: La	afayette						
7.1	S	613S7.1	HEADWALL	48	SURFACE WATER			
7.2	Ν	613N7.2	HEADWALL	18	SURFACE WATER			
CR 61				•	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.36	W	616W.36	UNKNOWN	18	SURFACE WATER			
0.6	W	616W.600	UNKNOWN	24	WETLANDS			
0.87	W	616W.87	UNKNOWN	18	SWALE			
1.17	Е	616E1.17	HEADWALL	24	SURFACE WATER			
2	Е	616E2.00	FES	15	SWALE			
2.3	W	616W2.3	FES	15	SWALE			
2.91	W	616W2.91	FES	15	SWALE			
2.911	E	616E2.911	FES	15	SWALE			
3.13	E	616E3.13	FES	15	WETLANDS			
3.19	E	616E3.19	UNKNOWN	15	LOW AREA			
3.57	E	616E3.57	DAYLIGHT	15	WETLANDS			
3.9	E	616E3.90	HEADWALL	15	SURFACE WATER			
3.93	E	616E3.93	HEADWALL	15	WETLANDS			
4.09	E	616E4.09	FES	15	WETLANDS			
4.17	Е	616E4.17	HEADWALL	15	SURFACE WATER			
4.29	Е	616E4.29	DAYLIGHT	15	WETLANDS			
4.4	Е	616E4.40	UNKNOWN	15	SWALE			
4.46	W	616W4.46	HEADWALL	15	WETLANDS		\checkmark	
4.74	W	616W4.74	HEADWALL	15	SWALE			
4.8	W	616W4.80	DAYLIGHT	15	WETLANDS		\checkmark	

District: Lafayette

CR 62	U			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.17	Е	620E0.17	DAYLIGHT	18	LOW AREA			
0.938	Е	620E0.938		18	IN SWALE			
1.221	W	620W1.221			SCOUR HOLE			
1.529	W	620W1.529						
1.803	W	620W1.803						
1.9	0	620W1.9	DAYLIGHT	12	SWALE			
2.4	W	620W2.4	DAYLIGHT	18	LOW AREA			
2.5	Е	620E2.5	DAYLIGHT	18	SWALE			
2.7	Е	620E2.70	DAYLIGHT	18	LOW AREA			
2.79	Е	620E2.79	DAYLIGHT	18	LOW AREA			
3.35	Е	620E3.35	HEADWALL	10	LOW AREA			
3.4	E	620E3.40	DAYLIGHT	15	SWALE			
3.5	E	620E3.50	DAYLIGHT	15	SWALE			
3.7	W	620W3.70	DAYLIGHT	24	SWALE			
4.05	0	620W4.05	HEADWALL	24	SWALE			
4.5	Е	620E4.50	HEADWALL	18	SWALE			
4.52	Е	620E4.52	DAYLIGHT	15	SWALE			
4.6	Е	620E4.60	DAYLIGHT	18	SWALE			
4.8	W	620W4.80	HEADWALL	24	NEAR SURFACE WA			
4.85	W	620W4.85	DAYLIGHT	18	SURFACE WATER			
4.9	W	620W4.9	HEADWALL	18	SWALE			
4.95	W	620W4.95	HEADWALL	15	LOW AREA			
5.19	W	620W5.19	UNKNOWN	24	SWALE			
5.21	W	620W5.21	DAYLIGHT	18	SWALE			
5.4	W	620W5.40	DAYLIGHT	18	LOW AREA			
5.59	W	620W5.59	DAYLIGHT	18	SWALE			
5.63	W	620W5.63	DAYLIGHT	18	LOW AREA			
5.75	W	620W5.75	DAYLIGHT	18	NEAR SURFACE WA			
5.87	W	620W5.87	DAYLIGHT	18	LOW AREA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 26 of 56

Distrio	ct: La	afayette						
C R 62	3			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.25	Ν	623N0.25	DAYLIGHT	15	LOW AREA			
0.4	Ν	623N0.4	DAYLIGHT	15	LOW AREA			
0.91	Ν	623N0.91	DAYLIGHT	18	LOW AREA			
1	Ν	623N1.00	DAYLIGHT	15	LOW AREA			
1.1	S	623S1.10	WINGWALL	12	LOW AREA			
1.4	S	623S1.40	DAYLIGHT	15	LOW AREA			
1.65	Ν	623N1.65	DAYLIGHT	15	SWALE			
1.81	Ν	623N1.81	DAYLIGHT	15	LOW AREA			
1.9	Ν	623N1.90	DAYLIGHT	15	SCOUR HOLE			
2.1	Ν	623N2.10	DAYLIGHT	15	SCOUR HOLE			
3.81	Ν	623N3.81	DAYLIGHT	15	NEAR SURFACE WA			
3.9	S	623S3.90	DAYLIGHT	15	SWALE			
4.28	S	623S4.28	DAYLIGHT	15	LOW AREA			

ata Cross Needs Needs Drain Cleaned Repair URFACE WATER Image: Cleaned Image: Cleaned EAR SURFACE WA Image: Cleaned Image: Cleaned URFACE WATER Image: Cleaned Image: Cleaned
URFACE WATER
EAR SURFACE WA
EAR SURFACE WA Image: Constraint of the second
URFACE WATER
EAR SURFACE WA
EAR SURFACE WA
WALE
OW AREA
OW AREA
OW AREA
OW AREA
WALE
OW AREA
URFACE WATER
URFACE WATER

District: Lafayette

CR 66	1			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.21	Ν	661N0.21	DAYLIGHT	18	NEAR SURFACE WA			
0.3	S	661S0.3	DAYLIGHT	15	SWALE			
0.49	S	661S0.49	DAYLIGHT	12	LOW AREA			
0.515	S	661S0.515	DAYLIGHT	18	LOW AREA			
0.7	S	661S0.7	DAYLIGHT	12	LOW AREA			
0.75	S	661S0.75	DAYLIGHT	12	LOW AREA			
0.8	S	661S0.8	DAYLIGHT	15	SWALE			
0.89	S	661S0.89	DAYLIGHT	15	SWALE			
1	S	661S1.0	DAYLIGHT	15	LOW AREA			
1.1	Ν	661N1.1	DAYLIGHT	15	LOW AREA			
1.12	Ν	661N1.12	DAYLIGHT	15	LOW AREA			
1.19	Ν	661N1.19	DAYLIGHT	15	LOW AREA			
1.41	Ν	661N1.41	DAYLIGHT	18	LOW AREA			
1.44	Ν	661N1.44	DAYLIGHT	15	LOW AREA			
1.46	Ν	661N1.46	DAYLIGHT	15	LOW AREA			
1.49	Ν	661N1.49	DAYLIGHT	15	LOW AREA			
2	Ν	661N2.0	DAYLIGHT	18	SWALE			
2.15	Ν	661N2.15	DAYLIGHT	18	LOW AREA			
2.65	Ν	661N2.65	DAYLIGHT	18	LOW AREA			
2.65	S	661S2.65	DAYLIGHT	18	LOW AREA			
2.69	Ν	661N2.69	DAYLIGHT	15	LOW AREA			
3.1	Ν	661N3.1	DAYLIGHT	18	SCOUR HOLE			
3.44	S	661S3.44	DAYLIGHT	18	LOW AREA			
3.7	S	661S3.7	DAYLIGHT	18	LOW AREA			
4.33	Ν	661N4.33	DAYLIGHT	18	LOW AREA			
4.53	Ν	661N4.53	DAYLIGHT	15	SWALE			
4.6	Ν	661N4.6	DAYLIGHT	18	SCOUR HOLE			
4.75	Ν	661N4.75	DAYLIGHT	15	LOW AREA			
4.85	Ν	661N4.85	DAYLIGHT	15	LOW AREA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 29 of 56

Distric	ct: L	afayette					
4.91	Ν	661N4.91	DAYLIGHT	15	LOW AREA		
4.95	Ν	661N4.95	DAYLIGHT	15	SURFACE WATER		
5.19	Ν	661N5.19	DAYLIGHT	15	LOW AREA		
5.2	Ν	661N5.2	DAYLIGHT	18	LOW AREA		
5.4	Ν	661N5.4	DAYLIGHT	15	LOW AREA		
5.55	Ν	661N5.55	DAYLIGHT	15	LOW AREA		
5.61	Ν	661N5.61	DAYLIGHT	15	SURFACE WATER		
5.7	S	661S5.7	DAYLIGHT	15	NEAR SURFACE WA		
5.8	S	661S5.8	DAYLIGHT	15	LOW AREA		
5.85	S	661S5.85	DAYLIGHT	36	SCOUR HOLE		
5.9	S	661S5.9	DAYLIGHT	15	LOW AREA		
5.95	S	661S5.95	DAYLIGHT	18	LOW AREA		
6	S	661S6.0	DAYLIGHT	15	LOW AREA		
6.05	S	661S6.05	DAYLIGHT	12	LOW AREA		
6.12	S	661S6.12	DAYLIGHT	15	SCOUR HOLE		
6.39	S	661S6.39	DAYLIGHT	18	SWALE		
7.3	S	661S7.3	DAYLIGHT	15	SWALE		

Distrie	ct: La	afayette						
CR 66	3			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.2	S	663S0.20	DAYLIGHT	21	SWALE			
1.1	S	663S1.10	DAYLIGHT	15	SCOUR HOLE			
1.14	S	663S1.14	DAYLIGHT	15	SCOUR HOLE			
1.16	S	663S1.16	DAYLIGHT	18	SCOUR HOLE			
1.2	S	663S1.20	DAYLIGHT	21	LOW AREA			
1.25	S	663S1.25	DAYLIGHT	15	LOW AREA			
1.39	S	663S1.39	DAYLIGHT	15	LOW AREA			
1.4	S	663S1.40	DAYLIGHT	15	LOW AREA			
1.72	Ν	663N1.72	DAYLIGHT	21	SURFACE WATER			
2.02	S	663S2.02	DAYLIGHT	15	SCOUR HOLE			
2.1	S	663S2.10	DAYLIGHT	15	LOW AREA			
2.2	S	663S2.20	DAYLIGHT	15	LOW AREA			
2.21	S	663S2.21	DAYLIGHT	15	LOW AREA			
2.45	S	663S2.45	DAYLIGHT	18	LOW AREA			
2.54	S	663S2.54	UNKNOWN	15	LOW AREA			
2.75	S	663S2.75	DAYLIGHT	15	LOW AREA			
3.1	Ν	663N3.10	DAYLIGHT	15	LOW AREA			
CR 66	9			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
3.9	Ν	669N3.9	DAYLIGHT	24	SURFACE WATER			

				Ouijan Daia				weens
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
3.9	Ν	669N3.9	DAYLIGHT	24	SURFACE WATER			
4.1	Ν	669N4.1	DAYLIGHT	12	LOW AREA			
4.6	Ν	669N4.6	DAYLIGHT	18	LOW AREA			
4.7	Ν	669N4.70	WINGWALL	18	SURFACE WATER			
5.9	Ν	669N5.90	HEADWALL	15	SWALE			
7.05	S	669S7.05	DAYLIGHT	18	LOW AREA			
7.15	S	669S7.15	DAYLIGHT	15	LOW AREA			

Distri	ct: La	ıfayette						
CR 67	C R 673				fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.4	Ν	673N0.4	FES	36	LOW AREA			
0.93	S	673S0.93	DAYLIGHT	15	SCOUR HOLE			
1	Ν	673N1.0	DAYLIGHT	18	LOW AREA			

	t: La	ayton						
CR 52	1			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
37.27	Ν	521N37.27	DAYLIGHT	18	SWALE			
37.4	Ν	521N37.40	DAYLIGHT	15	LOW AREA			
37.5	S	521S37.5	DAYLIGHT	15	SCOUR HOLE			
37.58	S	521S37.58	DAYLIGHT	15	SWALE			
37.65	S	521S37.65	DAYLIGHT	18	SWALE			
38.1	S	521S38.1	DAYLIGHT	12	LOW AREA			
38.12	S	521S38.12	DAYLIGHT	12	LOW AREA			
38.31	S	521S38.31	DAYLIGHT	18	SCOUR HOLE			
39.05	Ν	521N39.05	DAYLIGHT	15	SWALE			
39.05	S	521S39.05	DAYLIGHT	15	SWALE			
39.79	S	521S39.79	DAYLIGHT	15	SCOUR HOLE			
39.88	S	521S39.88	DAYLIGHT	18	LOW AREA			
39.9	S	521S39.9	DAYLIGHT	18	SCOUR HOLE			
39.95	Ν	521N39.95	DAYLIGHT	12	NEAR SURFACE WA			
40.2	S	521S40.2	DAYLIGHT	15	LOW AREA			
40.28	S	521S40.28	DAYLIGHT	15	SWALE			
40.65	S	521S40.65	DAYLIGHT	21	LOW AREA			
40.7	S	521S40.7	DAYLIGHT	12	LOW AREA			
40.82	Ν	521N40.82	DAYLIGHT	15	LOW AREA			
42.05	Ν	521N42.05	DAYLIGHT	18	LOW AREA			
42.7	N	521N42.7	DAYLIGHT	15	LOW AREA			

Distric	ct: La	ayton						
CR 56	0			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.1	Е	560E0.10	DAYLIGHT	15	LOW AREA			
0.2	W	560W0.2	DAYLIGHT	15	SCOUR HOLE			
0.45	W	560W0.45	DAYLIGHT	15	LOW AREA			
1.41	W	560W1.41	DAYLIGHT	15	SWALE			
1.51	W	560W1.51	DAYLIGHT	18	LOW AREA			
1.6	W	560W1.60	DAYLIGHT	15	LOW AREA			
1.8	E	560E1.80	DAYLIGHT	24	SCOUR HOLE			
1.9	E	560E1.90	UNKNOWN	15	LOW AREA			
2.05	W	560W2.05	DAYLIGHT	15	SWALE			
2.1	Е	560E2.10	DAYLIGHT	15	LOW AREA			
2.7	Е	560E2.70	UNKNOWN	15	SURFACE WATER			
2.71	W	560W2.71	UNKNOWN	15	SURFACE WATER			
3.4	Е	560E3.40	DAYLIGHT	15	LOW AREA			
3.72	Е	560E3.72	DAYLIGHT	15	LOW AREA			
3.95	Е	560E3.95	DAYLIGHT	15	SCOUR HOLE			
5	E	560E5.0	DAYLIGHT	15	LOW AREA			
CR 61	5			 Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.08	Ν	615N0.08	DAYLIGHT	12	LOW AREA			
0.2	Ν	615N0.20	DAYLIGHT	15	SWALE			
0.21	Ν	615N0.21	DAYLIGHT	12	LOW AREA			
0.25	Ν	615N0.25	DAYLIGHT	12	LOW AREA			
0.3	N	615N0.30	DAYLIGHT	12	LOW AREA			
0.5	N	615N0.5	DAYLIGHT	12	LOW AREA			

Distri	ct: La	ayton						
CR 64	0			Outi	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.63	E	640E0.63	DAYLIGHT	15	LOW AREA			
0.83	E	640E0.83	DAYLIGHT	15	SWALE			
0.9	E	640E0.90	DAYLIGHT	15	SWALE			
1.15	E	640E1.15	DAYLIGHT	12	LOW AREA			
1.35	E	640E1.35	DAYLIGHT	15	LOW AREA			
CR 64	5			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.25	S	645S1.25	DAYLIGHT	12	IN SWALE			
1.5	S	645S1.5	FES	24	IN SWALE			
1.63	S	645S1.63	DAYLIGHT	15	IN BANK, TOE			
1.9	Ν	645N1.9	WINGWALL	15	IN WATER		\checkmark	
2.82	Ν	645N2.82	DAYLIGHT	18	IN BANK, TOE			
3.17	S	645S3.17	DAYLIGHT	15	IN SWALE			
3.37	S	645S3.37	DAYLIGHT	18	IN BANK, TOE			
3.47	S	645S3.47	DAYLIGHT	15	IN BANK, TOE			
CR 64	6			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.14	Е	646E0.14	DAYLIGHT	12	IN SWALE			
0.34	0	646W0.34	DAYLIGHT	12	IN SWALE			
0.49	W	646W0.49	DAYLIGHT	12	IN SWALE			
0.52	W	646W0.52	DAYLIGHT	12	IN BANK, TOE			
0.55	Е	646E0.55	DAYLIGHT	15	IN WATER			
0.85	W	646W0.85	DAYLIGHT	15	IN WATER			

Distrie	ct: La	yton						
C R 65	0			Outj	fall Data	Cross		Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.15	W	650W0.15	DAYLIGHT	18	LOW AREA			
0.45	Е	650E0.45	DAYLIGHT	18	LOW AREA			
0.87	0	650W0.87	DAYLIGHT	15	LOW AREA			
1.61	Е	650E1.61	DAYLIGHT	18	LOW AREA			
1.8	E	650E1.80	HEADWALL	15	LOW AREA			
2.05	W	650W2.05	FES	18	LOW AREA			
4.68	Е	650E4.68	DAYLIGHT	18	SWALE			

Distrio	t: La	yton						
C R 65.	3			Outt	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
1.83	Ν	653N1.83	DAYLIGHT	15	LOW AREA			
1.88	Ν	653N1.88	DAYLIGHT	12	SWALE			
2.1	S	653S2.10	DAYLIGHT	18	WETLANDS			
2.4	S	653S2.40	DAYLIGHT	21	LOW AREA			
2.55	S	653S2.55	DAYLIGHT	12	LOW AREA			
3.05	S	653S3.05	DAYLIGHT	18	LOW AREA			
3.29	Ν	653N3.29	DAYLIGHT	8	SCOUR HOLE			
3.49	Ν	653N3.49	DAYLIGHT	18	SWALE			
3.625	Ν	653N3.625		24		\checkmark		
4	S	653S4.00	UNKNOWN	21	LOW AREA			
4.11	S	653S4.11	DAYLIGHT	36	SWALE			
4.4	S	653S4.40	DAYLIGHT	12	LOW AREA			
4.45	S	653S4.45	DAYLIGHT	18	LOW AREA			
4.8	S	653S4.80	DAYLIGHT	30	SWALE			
4.9	S	653S4.90	DAYLIGHT	15	SCOUR HOLE			
5.2	Ν	653N5.2	DAYLIGHT	15	SWALE			
5.25	S	653S5.25	DAYLIGHT	15	LOW AREA			
5.3	S	653S5.30	DAYLIGHT	18	LOW AREA			
5.6	S	653S5.60	DAYLIGHT	21	LOW AREA			
5.82	S	653S5.82	DAYLIGHT	24	SCOUR HOLE			
5.85	S	653S5.85	DAYLIGHT	24	SCOUR HOLE			
5.95	S	653S5.95	DAYLIGHT	15	LOW AREA			
6	S	653S6.00	DAYLIGHT	15	LOW AREA			
6.1	S	653S6.1	FES	15	LOW AREA			
6.15	N	653N6.15	FES	15	SWALE			
6.16	N	653N6.16	WINGWALL	15	SURFACE WATER			
6.25	S	653S6.25	DAYLIGHT	24	SWALE			
6.35	S	653S6.35	DAYLIGHT	18	SCOUR HOLE			
6.52	S	653S6.52	DAYLIGHT	18	SWALE			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 37 of 56

Distric	t: La	avton						
6.54	S	653S6.54	DAYLIGHT	21	SWALE			
6.75	S	653S6.75	DAYLIGHT	30	SWALE			
6.77	N	653N6.77	DAYLIGHT	15	SURFACE WATER			
6.77	N	653N6.77	DAYLIGHT	15	SURFACE WATER			
6.8	S	653S6.80	DAYLIGHT	18	SWALE			
7.12	S	653S7.12	DAYLIGHT	18	SWALE			
CR 654						C	X7 I	X 7 1
MM	D:		End Stule	•	Call Data	Cross Drain	Needs Cleaned	Needs Renair
0.1	Dir E	Outfall ID 654E0.1	End Style	18	Location SWALE			
		004EU.1	DATLIGHT	10	SWALE			
CR 656				Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.2	Е	656E0.2	FES	21	LOW AREA			
0.47	Е	656E0.47	DAYLIGHT	18	NEAR SURFACE WA			
CR 675				Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
				DILC		2		
0.19	S	675S0.19	FES	18	SCOUR HOLE			
0.19	S	675S0.19	FES	18	SCOUR HOLE			
0.19	S S	675S0.19 675S0.42	FES DAYLIGHT	18 15	SCOUR HOLE			
0.19 0.42 0.51	S S S	675S0.19 675S0.42 675S0.51	FES DAYLIGHT DAYLIGHT	18 15 15	SCOUR HOLE SCOUR HOLE SCOUR HOLE			
0.19 0.42 0.51 0.59	S S S S	675S0.19 675S0.42 675S0.51 675S0.59	FES DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE			
0.19 0.42 0.51 0.59 0.6	S S S S	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15 15 15	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA			
0.19 0.42 0.51 0.59 0.6 0.63	S S S S S S	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6 675S0.63	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15 15 24	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA			
0.19 0.42 0.51 0.59 0.6 0.63 0.79	S S S S S N	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6 675S0.63 675S0.79	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15 15 24 18	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE			
0.19 0.42 0.51 0.59 0.6 0.63 0.79 1.21	S S S S S N S	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6 675S0.63 675S0.79 675S1.21	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15 15 24 18 15	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE SCOUR HOLE			
0.19 0.42 0.51 0.59 0.6 0.63 0.79 1.21 1.29	S S S S S S S S S S S S S S S	675S0.19 675S0.42 675S0.51 675S0.59 675S0.63 675S0.63 675S0.79 675S1.21 675S1.29	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT	18 15 15 15 15 24 18 15 12	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE SCOUR HOLE SCOUR HOLE			
0.19 0.42 0.51 0.59 0.6 0.63 0.79 1.21 1.29 1.32 2.7	S S S S S S S S S S S N	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6 675S0.63 675S0.79 675S1.21 675S1.29 675S1.32 675S1.32	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT HEADWALL	18 15 15 15 15 24 18 15 15 14 15 18 15 18 15 18 15 12 15 18	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA			
0.19 0.42 0.51 0.59 0.6 0.63 0.79 1.21 1.29 1.32 2.7 2.99	S S	675S0.19 675S0.42 675S0.51 675S0.59 675S0.63 675S0.63 675S0.79 675S1.21 675S1.29 675S1.32 675N2.7 675S2.99	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT HEADWALL DAYLIGHT	18 15 15 15 24 18 15 15 18 15 18 15 18 15 18 15 18 18 18 18	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA SWALE			
0.19 0.42 0.51 0.59 0.6 0.63 0.79 1.21 1.29 1.32 2.7	S S S S S S S S S S S N	675S0.19 675S0.42 675S0.51 675S0.59 675S0.6 675S0.63 675S0.79 675S1.21 675S1.29 675S1.32 675S1.32	FES DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT DAYLIGHT HEADWALL	18 15 15 15 15 24 18 15 15 14 15 18 15 18 15 18 15 12 15 18	SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA LOW AREA SCOUR HOLE SCOUR HOLE SCOUR HOLE SCOUR HOLE LOW AREA			

District: Municipal Owned

CR 52	521			Out	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location		Cleaned	
20.65	Ν	521N20.65	HEADWALL	18	WETLANDS			
21	Ν	521N21.0	WINGWALL	18	SCOUR HOLE & SW			
22	Ν	521N22.0	UNKNOWN	18	NEAR SURFACE WA			
22.3	Ν	521N22.3	HEADWALL	18	NEAR SURFACE WA			
22.5	S	521S22.5	OTHER	48	SWALE			
22.8	S	521S22.8	ABUTMENT Wall	18	SWALE			
22.9	S	521S22.9	FES	24	SCOUR HOLE & SW			
23.33	S	521S23.33	HEADWALL	18	SWALE			
23.5	S	521S23.5	UNKNOWN	12	LOW AREA			

R 52	1			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain		Repair
11	Ν	521N11.0	DAYLIGHT	15	LOW AREA			
11.2	Ν	521N11.2	DAYLIGHT	18	LOW AREA			
11.4	Ν	521N11.4	DAYLIGHT	15	NEAR SURFACE WA			
11.5	S	521S11.5	HEADWALL	15	NEAR SURFACE WA			
11.6	Ν	521N11.6	DAYLIGHT	15	LOW AREA			
12	S	521S12.0	UNKNOWN	10	LOW AREA			
12.3	Ν	521N12.3	OTHER	15	SCOUR HOLE & SW			
12.6	S	521S12.6	DAYLIGHT	15	LOW AREA			
12.8	S	521S12.8	ABUTMENT Wall	15	LOW AREA			
13.1	Ν	521N13.1	DAYLIGHT	18	WETLANDS			
3.3	S	521S13.3	DAYLIGHT	15	SCOUR HOLE & SW			
3.3	S	521S13.3	DAYLIGHT	15	SCOUR HOLE & SW			
13.52	Ν	521N13.52	DAYLIGHT	36	WETLANDS			
3.52	Ν	521N13.52	DAYLIGHT	18	SCOUR HOLE & SW			
13.6	Ν	521N13.6	UNKNOWN	18	LOW AREA			
3.9	Ν	521N13.9	DAYLIGHT	15	SURFACE WATER			
13.95	Ν	521N13.95	DAYLIGHT	15	SURFACE WATER			
13.98	Ν	521N13.98	DAYLIGHT	15	WETLANDS			
4	Ν	521N14	DAYLIGHT	15	SCOUR HOLE & SW			
14	Ν	521N14.0	DAYLIGHT	15	SCOUR HOLE & SW			
14.42	Ν	521N14.42	DAYLIGHT	15	SURFACE WATER			
14.55	Ν	521N14.55	DAYLIGHT	15	SURFACE WATER			
14.99	Ν	521N14.99	DAYLIGHT	36	SURFACE WATER			
5	Ν	521N15.00	DAYLIGHT	15	WETLANDS			
15	Ν	521N15.0	DAYLIGHT	15	WETLANDS			
15.1	Ν	521N15.10	DAYLIGHT	15	WETLANDS			
15.1	Ν	521N15.1	DAYLIGHT	15	WETLANDS			
15.12	Ν	521N15.12	DAYLIGHT	15	WETLANDS			
15.2	N	521N15.2	DAYLIGHT	18	WETLANDS		\checkmark	

Printed: Tuesday, April 23, 2019 Sussex County Division of Public Works Developed February 2007 Page 40 of 56

istric	t: Si	tillwater						
15.23	N	521N15.23	DAYLIGHT	18	WETLANDS		\checkmark	
15.3	Ν	521N15.3	DAYLIGHT	15	WETLANDS			
15.35	Ν	521N15.35	OTHER	15	SCOUR HOLE			
15.75	Ν	521N15.75	OTHER	42	SURFACE WATER			
15.84	S	521S15.84	DAYLIGHT	18	SURFACE WATER		\checkmark	
16	Ν	521N16.0	UNKNOWN	15	LOW AREA			
16.11	Ν	521N16.11	UNKNOWN	15	WETLANDS			
16.18	Ν	521N16.18	DAYLIGHT	15	WETLANDS			
16.29	Ν	521N16.29	DAYLIGHT	15	WETLANDS		\checkmark	
16.6	Ν	521N16.6	DAYLIGHT	15	SURFACE WATER			
16.68	Ν	521N16.68	DAYLIGHT	15	SURFACE WATER			
16.7	Ν	521N16.70	DAYLIGHT	24	WETLANDS			
16.75	Ν	521N16.75	DAYLIGHT	15	LOW AREA			
16.83	Ν	521N16.83	OTHER	15	WETLANDS			
16.85	Ν	521N16.85	DAYLIGHT	24	WETLANDS			
16.9	Ν	521N16.9	DAYLIGHT	48	SURFACE WATER			
17.09	Ν	521N17.09	HEADWALL	18	SURFACE WATER			
17.1	S	521S17.10	ABUTMENT Wall	15	SURFACE WATER			
17.6	Ν	521N17.6	UNKNOWN	15	LOW AREA			
17.7	Ν	521N17.7	DAYLIGHT	12	SURFACE WATER			
17.78	Ν	521N17.78	DAYLIGHT	15	SURFACE WATER			
17.85	S	521S17.85	DAYLIGHT	15	WETLANDS			
17.98	Ν	521N17.98	DAYLIGHT	18	SURFACE WATER			
17.98	Ν	521N17.98	DAYLIGHT	18	SURFACE WATER			
18.49	Ν	521N18.49	DAYLIGHT	15	SWALE			
18.5	Ν	521N18.50	DAYLIGHT	36	SWALE	\checkmark		
18.9	Ν	521N18.9	DAYLIGHT	18	SWALE			
19	Ν	521N19.0	DAYLIGHT	18	SWALE			
19.2	Ν	521N19.2	DAYLIGHT	15	SWALE			
19.35	N	521N19.35	HEADWALL	18	WETLANDS			
19.4	S	521S19.4	OTHER	15	SURFACE WATER			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 41 of 56

Distric	:t: St	illwater						
19.48	Ν	521N19.48	DAYLIGHT	15	SWALE			
C R 610)			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.4	W	610W0.40	HEADWALL	21	LOW AREA			
0.81	W	610W0.81	HEADWALL	12	NEAR SURFACE WA			
0.85	W	610W0.85	DAYLIGHT	18	LOW AREA			
0.9	W	610W0.90	HEADWALL	12	LOW AREA			
0.95	W	610W0.95	HEADWALL	15	NEAR SURFACE WA			
1.05	W	610W1.05	DAYLIGHT	15	LOW AREA			
1.75	E	610E1.75	DAYLIGHT	15	LOW AREA			
3.5	W	610W3.50	HEADWALL	12	NEAR SURFACE WA			
3.65	W	610W3.65	UNKNOWN	15	NEAR SURFACE WA			
3.68	W	610W3.68	HEADWALL	18	SURFACE WATER			
3.81	E	610E3.81	DAYLIGHT	15	LOW AREA			
3.9	W	610W3.9	DAYLIGHT	24	LOW AREA			

CR 612

				Out	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.05	E	612E.05	HEADWALL	15	NEAR SURFACE WA			
0.1	E	612E.10	HEADWALL	15	LOW AREA			
0.3	W	612W.30	DAYLIGHT	15	LOW AREA			
0.35	E	612E.35	ABUTMENT Wall	15	SURFACE WATER			
0.4	Е	612E.40	HEADWALL	15	NEAR SURFACE WA			

Distrio	ct: St	illwater						
C R 61	R 614			Outj	Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.1	Е	614E0.10	DAYLIGHT	36	SWALE			
0.35	Е	614E0.35	DAYLIGHT	15	SURFACE WATER			
0.59	Е	614E0.59	DAYLIGHT	15	SWALE			
0.73	Е	614E0.73	DAYLIGHT	15	NEAR SURFACE WA			
0.8	Е	614E0.80	DAYLIGHT	18	NEAR SURFACE WA			
0.9	W	614W0.90	DAYLIGHT	15	LOW AREA			
1.05	W	614W1.05	DAYLIGHT	15	LOW AREA			
1.2	W	614W1.20	DAYLIGHT	15	SWALE			
1.29	W	614W1.29	DAYLIGHT	15	LOW AREA			
1.4	Е	614E1.40	DAYLIGHT	18	NEAR SURFACE WA			

CR 61	/			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.36	Ν	617N0.36	DAYLIGHT	18	WETLANDS			
0.4	Ν	617N0.4	DAYLIGHT	15	WETLANDS			
0.68	Ν	617N0.68	DAYLIGHT	18	WETLANDS			
0.78	Ν	617N0.78	DAYLIGHT	12	WETLANDS			
0.89	Ν	617N0.89	DAYLIGHT	18	WETLANDS			
0.9	Ν	617N0.9	DAYLIGHT	18	WETLANDS			
1.06	S	617S1.06	DAYLIGHT	18	SURFACE WATER			
1.2	S	617S1.2	DAYLIGHT	18	SURFACE WATER			
1.38	S	617S1.31	DAYLIGHT	18	SURFACE WATER		\checkmark	\checkmark
1.73	S	617S1.73	DAYLIGHT	18	WETLANDS			
1.75	S	617S1.75	DAYLIGHT	18	WETLANDS	\checkmark		
1.83	S	617S1.83	DAYLIGHT	15	WETLANDS			
1.89	S	617S1.89	DAYLIGHT	18	SURFACE WATER			
1.9	S	617S1.9	DAYLIGHT	18	WETLANDS			
1.91	S	617S1.91	Daylight	18	WETLANDS			
2	Ν	617N2.00	DAYLIGHT	18	WETLANDS			
2.2	N	617N2.2	DAYLIGHT	18	WETLANDS			
2.35	N	617N2.35	DAYLIGHT	18	SURFACE WATER			
2.4	N	617N2.4	DAYLIGHT	18	LOW AREA			
2.4	N	617N2.4	DAYLIGHT	18	LOW AREA			
2.48	N	617N2.48	DAYLIGHT	18	WETLANDS			
2.8	N	617N2.8	DAYLIGHT	18	LOW AREA			
3.78	S	617S3.78	UNKNOWN	12	WETLANDS			
3.88	N	617N3.88	DAYLIGHT	18	WETLANDS			
3.91	N	617N3.91	DAYLIGHT	18	WETLANDS			
3.93	N	617N3.93	DAYLIGHT	18	WETLANDS			
4	N	617N4.0	DAYLIGHT	18	WETLANDS			
4.1	N	617N4.1	DAYLIGHT	24	WETLANDS			
4.16	N	617N4.16	DAYLIGHT	18	WETLANDS			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 44 of 56

4.5 4.56 4.66	N N N N	617N4.5 617N4.56	DAYLIGHT	24	WETLANDS			
	Ν		DAVLICUT					
4.66			DATLIGHT	18	WETLANDS	\checkmark		
	N	617N4.66	DAYLIGHT	18	WETLANDS	\checkmark		
4.69		617N4.69	DAYLIGHT	18	WETLANDS			
4.9	S	617S4.9	UNKNOWN	18	SURFACE WATER			
4.99	Ν	617N4.99	DAYLIGHT	18	SURFACE WATER			
5	Ν	617N5.0	DAYLIGHT	18	SURFACE WATER			
5.12	Ν	617N5.12	DAYLIGHT	18	WETLANDS			
5.2	Ν	617N5.2	HEADWALL	18	SCOUR HOLE & SW			
5.3	Ν	617N5.3	DAYLIGHT	18	SWALE			
5.4	Ν	617N5.4	DAYLIGHT	18	WETLANDS			
5.5	Ν	617N5.5	DAYLIGHT	18	WETLANDS			
5.78	Ν	617N5.78	DAYLIGHT	18	WETLANDS			
5.8	Ν	617N5.8	DAYLIGHT	18	WETLANDS			
6.3	S	617S6.3	DAYLIGHT	18	SURFACE WATER			
6.45	S	617S6.45	DAYLIGHT	15	SURFACE WATER			
6.5	S	617S6.5	DAYLIGHT	18	SURFACE WATER			
6.9	Ν	617N6.9	DAYLIGHT	18	SWALE			
6.95	Ν	617N6.95	DAYLIGHT	18	WETLANDS			
7.07	Ν	617N7.07	DAYLIGHT	18	WETLANDS	\checkmark		
7.24	Ν	617N7.24	DAYLIGHT	18	WETLANDS	\checkmark		
7.28	Ν	617N7.28	DAYLIGHT	18	WETLANDS			
7.55	Ν	617N7.55	DAYLIGHT	15	WETLANDS			
9	W	617W9.0	DAYLIGHT	15	WETLANDS			
9.1	Ν	617N9.1	DAYLIGHT	15	SWALE			
9.2	Ν	617N9.2	DAYLIGHT	15	SWALE			
C R 618	}			Out	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
0.11	Е	618E0.11	HEADWALL	15	LOW AREA			

15

LOW AREA

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works

618E0.2

HEADWALL

Е

0.2

 \square

District: Stillwater

C R 61	9			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.85	S	619S.85	DAYLIGHT	15	SWALE			
1.01	S	619S1.01	DAYLIGHT	15	SWALE			
1.23	S	619S1.23	HEADWALL	15	LOW AREA			
1.36	S	619S1.36	DAYLIGHT	15	LOW AREA			
1.6	S	619S1.60	DAYLIGHT	15	LOW AREA			
1.92	S	619S1.92	HEADWALL	15	SWALE			
1.99	S	619S1.99	HEADWALL	15	SURFACE WATER			
2.36	Ν	619N2.36	DAYLIGHT	15	WETLANDS			
2.84	S	619S2.84	DAYLIGHT	15	SWALE			
2.96	S	619S2.96	DAYLIGHT	12	SWALE			
3.62	Ν	619N3.62	DAYLIGHT	15	WETLANDS			

C R 62	2							
N 02	2			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.14	Е	622E0.14	DAYLIGHT	24	SURFACE WATER			
0.73	W	622W0.73	DAYLIGHT	18	WETLANDS			
0.92	W	622W0.92	DAYLIGHT	15	LOW AREA			
1.03	W	622W1.03	DAYLIGHT	15	LOW AREA			
2.26	Е	622E2.26	DAYLIGHT	15	SURFACE WATER			
2.74	Е	622E2.74	DAYLIGHT	15	NEAR SURFACE WA			
3.72	Е	622E3.72	DAYLIGHT	15	LOW AREA			
4.37	W	622W4.37	DAYLIGHT	15	LOW AREA			
4.59	Е	622E4.59	DAYLIGHT	15	LOW AREA			
4.76	Е	622E4.76	DAYLIGHT	18	LOW AREA			
4.79	Е	622E4.79	DAYLIGHT	15	LOW AREA			
4.98	Е	622E 4.98	DAYLIGHT	15	LOW AREA			
5.33	Е	622E5.33	HEADWALL	24	SURFACE WATER			\checkmark

R 519)			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	
78.4	0	519N78.4	FES	18	LOW AREA			
78.4	S	519S78.4	FES	18	LOW AREA			
79.05	S	519S79.05	DAYLIGHT	15	LOW AREA			
79.4	Ν	519N79.4	OTHER	18	SURFACE WATER			
79.72	S	519S79.72	DAYLIGHT	15	LOW AREA			
79.75	S	519S79.75	DAYLIGHT	12	LOW AREA			
79.85	S	519S79.85	DAYLIGHT	12	LOW AREA			
79.92	S	519S79.92	DAYLIGHT	12	LOW AREA			
79.96	S	519S79.96	DAYLIGHT	15	LOW AREA			
80.25	0	519S80.25	DAYLIGHT	18	LOW AREA			
80.3	S	519S80.3	DAYLIGHT	15	LOW AREA			
80.35	S	519S80.35	DAYLIGHT	21	LOW AREA			
80.4	0	519080.4	DAYLIGHT	18	LOW AREA			
80.52	S	519S80.52	DAYLIGHT	12	LOW AREA			
80.65	Ν	519N80.65	UNKNOWN	15	NEAR SURFACE WA			
80.71	0	519N80.71	DAYLIGHT	18	LOW AREA			
81.9	Ν	519N81.9	FES	18	LOW AREA			
82.85	S	519S82.85	DAYLIGHT	18	SWALE			
86.005	Ν	519N86.00	DAYLIGHT	15	LOW AREA			
86.15	Ν	519N86.15	DAYLIGHT	18	LOW AREA			
86.2	S	519S86.2	DAYLIGHT	36	SWALE			
86.28	Ν	519N86.28	DAYLIGHT	15	LOW AREA			
86.75	S	519S86.75	DAYLIGHT	15	NEAR SURFACE WA			
87.31	Ν	519N87.31	DAYLIGHT	12	LOW AREA			
87.95	Ν	519N87.95	DAYLIGHT	12	LOW AREA			
88.4	N	519N88.4	DAYLIGHT	18	LOW AREA			

Distric	ct: Su	issex						
C R 56.	5			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.5	0	565S1.5	DAYLIGHT	18	IN SWALE			
1.75	S	565S1.75	DAYLIGHT	15	IN BANK, TOE			
2	S	565S2	DAYLIGHT	18	IN BANK, TOE			
2.05	S	565S2.05	DAYLIGHT	18	IN SWALE			
3.45	S	565S3.45	HEADWALL	18	IN BANK, TOE			
3.55	Ν	565N3.55	WINGWALL	18	IN SWALE			
4.03	Ν	565N4.03	DAYLIGHT	18	IN SWALE			
4.1	Ν	565N4.1	DAYLIGHT	18	IN SWALE			
4.12	Ν	565N4.12	DAYLIGHT	18	IN WATER			
4.15	Ν	565N4.15	DAYLIGHT	18	IN BANK, TOE			
4.2	Ν	565N4.2	DAYLIGHT	24	IN BANK, TOE			
4.25	Ν	565N4.25	DAYLIGHT	18	IN BANK, TOE			
4.3	Ν	565N4.3	DAYLIGHT	18	IN BANK, TOE			
4.37	Ν	565N4.37	DAYLIGHT	18	IN BANK, TOE			
4.4	Ν	565N4.4	DAYLIGHT	18	IN BANK, TOE			
5.1	Ν	565N5.1	DAYLIGHT	15	LOW AREA			
5.4	Ν	565N54	DAYLIGHT	12	LOW AREA			
5.95	Ν	565N5.95	DAYLIGHT	21	LOW AREA			
6.05	Ν	565N6.05	DAYLIGHT	15	LOW AREA			
6.92	Ν	565N6.92	FES	15	LOW AREA			
7.2	Ν	565N7.2	DAYLIGHT	18	WETLANDS			
7.3	Ν	565N7.3	DAYLIGHT	15	LOW AREA			
7.418	Ν	565N7.418	DAYLIGHT	12	IN SWALE			
7.44	Ν	565N7.44	DAYLIGHT	36	IN SWALE	\checkmark		
7.7	Ν	565N7.7	DAYLIGHT	15	LOW AREA			
7.78	S	565S7.78	WINGWALL	24	NEAR SURFACE WA			
8.32	S	565S8.32	DAYLIGHT	30	SCOUR HOLE & SW			
8.5	S	565S8.5	DAYLIGHT	15	LOW AREA			
8.85	S	565S8.85	DAYLIGHT	30	LOW AREA			

Printed: **Tuesday, April 23, 2019** Sussex County Division of Public Works Developed February 2007 Page 48 of 56

9.29	S	565S9.29	DAYLIGHT	18	LOW AREA			
9.3	S	565S9.3	DAYLIGHT	15	LOW AREA			
C R 62	8			 Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.15	Е	628E0.15	DAYLIGHT	12	LOW AREA			
0.2	Е	628E0.2	DAYLIGHT	15	LOW AREA			
0.72	Е	628E0.72	DAYLIGHT	18	NEAR SURFACE WA			
0.82	Е	628E0.82	DAYLIGHT	15	SURFACE WATER			
0.87	Е	628E0.87	DAYLIGHT	15	SURFACE WATER			
1.61	W	628W1.61	DAYLIGHT	21	LOW AREA			
2.02	Е	628E2.02	DAYLIGHT	18	NEAR SURFACE WA			
2.15	E	628E2.15	DAYLIGHT	18	LOW AREA			
2.55	E	628E2.55	DAYLIGHT	18	LOW AREA			
2.65	Е	628E2.65	DAYLIGHT	21	LOW AREA			

	0			Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.6	Ν	635N1.6	DAYLIGHT	18	SWALE			
1.6	S	635S1.6	DAYLIGHT	18	SCOUR HOLE & SW			
1.71	0	635S1.71	DAYLIGHT	18	LOW AREA			
1.85	Ν	635N1.85	DAYLIGHT	18	NEAR SURFACE WA			
1.95	S	635S1.95	DAYLIGHT	18	NEAR SURFACE WA			
2.39	Ν	635N2.39	DAYLIGHT	21	LOW AREA			
2.45	Ν	635N2.45	DAYLIGHT	15	LOW AREA			
2.5	S	635S2.50	DAYLIGHT	21	LOW AREA			
2.69	Ν	635N2.69	DAYLIGHT	15	WETLANDS			
3.1	Ν	635N3.1	UNKNOWN	15	SURFACE WATER			
3.3	Ν	635N3.30	DAYLIGHT	15	LOW AREA			
3.7	S	635S3.7	DAYLIGHT	18	LOW AREA			
3.74	S	635S3.74	DAYLIGHT	18	LOW AREA			

Distric	ct: Su	issex						
CR 63	7			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.61	Ν	637N0.61	DAYLIGHT	15	LOW AREA			
CR 63	9			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.3	Ν	639N0.3	DAYLIGHT	15	LOW AREA			
0.49	Ν	639N0.49	DAYLIGHT	30	SWALE		\checkmark	
0.83	Ν	639N0.83	HEADWALL	18	LOW AREA			
CR 64	C R 648		Outfall Data		Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Claunad	Repair
		Outjuit ID	Linu Style	Size	Localion	Druin	Cleanea	nepun
0.6	W	648W0.60	WINGWALL	12	SURFACE WATER			
0.6 CR 64	W	•	•	12		Cross	Needs	Needs
	W	•	•	12	SURFACE WATER			Needs
CR 64	W 9	648W0.60	WINGWALL	12 Outj	SURFACE WATER	Cross	Needs	Needs
CR 642 MM	• W 9 Dir	648W0.60 Outfall ID	WINGWALL <i>End Style</i>	12 Outj Size	SURFACE WATER <i>fall Data Location</i>	Cross	Needs	Needs
<i>CR</i> 649 <i>MM</i> 0.25	W 9 Dir N	648W0.60 <i>Outfall ID</i> 649N0.25	WINGWALL End Style DAYLIGHT	12 Outj Size 15	SURFACE WATER <i>fall Data Location</i> LOW AREA	Cross	Needs	Needs Repair
<i>CR</i> 642 <i>MM</i> 0.25 0.28	W 9 Dir N N	648W0.60 <i>Outfall ID</i> 649N0.25 649N0.28	WINGWALL End Style DAYLIGHT DAYLIGHT	12 Outj Size 15 15	SURFACE WATER	Cross	Needs	Needs Repair
CR 642 MM 0.25 0.28 0.65	W 9 Dir N N N	648W0.60 Outfall ID 649N0.25 649N0.28 649N0.65	WINGWALL End Style DAYLIGHT DAYLIGHT DAYLIGHT	12 Outf Size 15 15 15	SURFACE WATER Fall Data Location LOW AREA LOW AREA SWALE	Cross	Needs	Needs Repair

Distric	t: Su	issex						
C R 650				Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
5.1	W	650W5.10	DAYLIGHT	15	SWALE			
5.45	0	650E5.45	DAYLIGHT	18	LOW AREA			
6.91	W	650W6.91	DAYLIGHT	15	LOW AREA			
7.3	W	650W7.30	FES	18	SWALE			
7.4	W	650W7.40	UNKNOWN	15	LOW AREA			
7.65	W	650W7.65	DAYLIGHT	18	LOW AREA			
7.7	W	650W7.70	DAYLIGHT	15	LOW AREA			
7.82	W	650W7.82	DAYLIGHT	18	LOW AREA			
7.91	W	650W7.91	FES	15	SCOUR HOLE			
8.08	E	650E8.08	DAYLIGHT	15	SWALE			
8.45	0	650E8.45	DAYLIGHT	15	SWALE			
8.53	W	650W8.53	DAYLIGHT	15	LOW AREA			
8.65	W	650W8.65	DAYLIGHT	15	LOW AREA		\checkmark	
9.25	E	650E9.25	DAYLIGHT	15	SURFACE WATER		\checkmark	
9.39	W	650W9.39	DAYLIGHT	15	LOW AREA			
9.53	E	650E9.53	FES	30	LOW AREA			
9.53	W	650W9.53	DAYLIGHT	15	LOW AREA			
9.75	W	650W9.75	DAYLIGHT	15	LOW AREA			
9.9	W	650W9.9	DAYLIGHT	15	LOW AREA			
10.4	E	650E10.4	DAYLIGHT	15	SCOUR HOLE			
10.5	E	650E10.5	DAYLIGHT	15	SCOUR HOLE			
12.55	E	650E12.55	DAYLIGHT	15	LOW AREA			
12.79	W	650W12.79	DAYLIGHT	15	LOW AREA			
13.25	W	650W13.25	WINGWALL	18	SURFACE WATER			

Distrie	ct: Su	issex						
C R 651				Outf	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.25	Ν	651N0.25	DAYLIGHT	18	SCOUR HOLE			
0.3	Ν	651N0.3	DAYLIGHT	30	LOW AREA			
0.39	Ν	651N0.39	DAYLIGHT	15	LOW AREA			
0.41	Ν	651N0.41	DAYLIGHT	18	LOW AREA			
0.5	Ν	651N0.5	DAYLIGHT	15	LOW AREA			
1.1	Ν	651N1.1	DAYLIGHT	15	LOW AREA			
1.2	Ν	651N1.2	UNKNOWN	15	LOW AREA			
1.41	S	651S1.41	DAYLIGHT	18	SURFACE WATER			
1.8	Ν	651N1.8	HEADWALL	18	LOW AREA			
1.9	Ν	651N1.90	HEADWALL	12	LOW AREA			
2.7	Ν	651N2.70	DAYLIGHT	15	LOW AREA			
2.73	Ν	651N2.73	DAYLIGHT	15	LOW AREA			
3.02	Ν	651N3.02	DAYLIGHT	15	LOW AREA			

Distric								
N J1.)			Outj	Cross	Needs	Needs	
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.8	S	515S0.80	DAYLIGHT	18	LOW AREA			
1.32	Ν	515N1.32	DAYLIGHT	12	SWALE			
3.05	S	515S3.05	DAYLIGHT	15	LOW AREA			
3.11	S	515S3.11	UNKNOWN	15	LOW AREA			
3.27	S	515S3.27	UNKNOWN	15	LOW AREA			
3.65	Ν	515N3.65	DAYLIGHT	12	SWALE			
4.21	S	515S4.21	DAYLIGHT	15	LOW AREA			
4.45	S	515S4.45	UNKNOWN	15	LOW AREA			
4.5	S	515S4.50	DAYLIGHT	15	LOW AREA			
5.1	S	515S5.1	DAYLIGHT	18	LOW AREA			
5.59	Ν	515N5.59	DAYLIGHT	15	LOW AREA			
5.8	Ν	515N5.8	DAYLIGHT	15	LOW AREA			
7.1	S	515S7.1	DAYLIGHT	15	LOW AREA			
7.17	S	515S7.17	DAYLIGHT	12	SCOUR HOLE			
7.29	S	515S7.29	DAYLIGHT	18	SWALE			
7.4	S	515S7.4	DAYLIGHT	15	SWALE			
7.65	S	515S7.65	DAYLIGHT	21	SCOUR HOLE & SW			
7.7	S	515S7.7	DAYLIGHT	15	SWALE			
7.75	S	515S7.75	DAYLIGHT	15	LOW AREA			
7.98	Ν	515N7.98	DAYLIGHT	36	SWALE			
8.15	S	515S8.15	DAYLIGHT	12	NEAR SURFACE WA			
8.35	Ν	515N8.35	FES	36	LOW AREA			
8.355	Ν	515N8.355	FES	24	Basin			
12.3	Ν	515N12.3	UNKNOWN	15	LOW AREA			

Distric	t: Ve	ernon						
C R 5 1	7			Outj	fall Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
43.15	Ν	517N43.15	DAYLIGHT	24	SWALE		\checkmark	
43.4	Ν	517N43.4	WINGWALL	24	SURFACE WATER			
43.4	S	517S43.4	WINGWALL	12	SURFACE WATER			
43.41	S	517S43.41	WINGWALL	12	SURFACE WATER			
43.65	S	517S43.65	DAYLIGHT	15	LOW AREA			
43.77	S	517S43.77	HEADWALL	36	SWALE		\checkmark	
44.02	S	517S44.02	DAYLIGHT	15	SWALE			
44.55	Ν	517N44.55	HEADWALL	15	SWALE			
44.95	S	517S44.95	DAYLIGHT	10	SWALE			
45.05	S	517S45.05	DAYLIGHT	15	LOW AREA			
45.08	S	517S45.08	DAYLIGHT	21	LOW AREA			
45.39	S	517S45.39	DAYLIGHT	12	LOW AREA			
45.45	S	517S45.45	DAYLIGHT	21	LOW AREA			
45.89	S	517S45.89	DAYLIGHT	15	LOW AREA			
45.95	S	517S45.95	DAYLIGHT	15	SCOUR HOLE			
48.08	Ν	517N48.08	DAYLIGHT	15	LOW AREA			
48.16	Ν	517N48.16	DAYLIGHT	15	LOW AREA			
48.4	Ν	517N48.4	DAYLIGHT	24	LOW AREA			
48.42	Ν	517N48.42	DAYLIGHT	18	LOW AREA			
48.75	Ν	517N48.75	DAYLIGHT	18	LOW AREA			
49	S	517S49.0	DAYLIGHT	15	LOW AREA			
49.08	S	517S49.08	FES	15	LOW AREA			
50.23	N	517N50.23	DAYLIGHT	15	SCOUR HOLE			
50.45	N	517N50.45	DAYLIGHT	15	SCOUR HOLE			
50.52	N	517N50.52	DAYLIGHT	15	LOW AREA			
51.6	S	517S51.6	HEADWALL	18	LOW AREA			
52.82	N	517N52.82	DAYLIGHT	15	LOW AREA			
53.11	N	517N53.11	DAYLIGHT	18	SWALE			
53.15	N	517N53.15	DAYLIGHT	12	LOW AREA			

Printed:Tuesday, April 23, 2019Sussex County Division of Public Works

Developed February 2007 Page 54 of 56

Distric	t: V	ernon						
53.25	Ν	517N53.25	DAYLIGHT	18	SWALE			
53.27	Ν	517N53.27	DAYLIGHT	12	SWALE			
53.4	Ν	517N53.4	DAYLIGHT	18	LOW AREA			
53.46	Ν	517N53.46	DAYLIGHT	18	LOW AREA			
53.56	Ν	517N53.56	DAYLIGHT	15	LOW AREA			
53.81	Ν	517N53.81	DAYLIGHT	18	LOW AREA			
54.15	Ν	517N54.15	DAYLIGHT	18	LOW AREA			
CR 565	5					~		
				-	all Data	Cross	Needs Closed	Needs Bengin
ММ	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Kepair
11.22	S	565S11.22	DAYLIGHT	15	SWALE			
12.86	Ν	565N12.86	DAYLIGHT	15	SURFACE WATER			
12.861	Ν	565N12.86	DAYLIGHT	15	SURFACE WATER			
13.05	S	565S13.05	DAYLIGHT	15	SCOUR HOLE			
13.1	S	565S13.1	DAYLIGHT	15	LOW AREA			
13.42	Ν	565N13.42	DAYLIGHT	15	SWALE			
13.65	S	565S13.65	DAYLIGHT	15	SWALE			
13.72	S	565S13.72	DAYLIGHT	15	SWALE			
13.781	S	565S13.781	DAYLIGHT	18	SWALE			
13.782	S	565S13.782	DAYLIGHT	15	SWALE			
14.12	Ν	565N141	DAYLIGHT	15	LOW AREA			
15.91	S	565S15.91	DAYLIGHT	15	SURFACE WATER			
16.05	S	565S16.05	DAYLIGHT	24	LOW AREA			
16.4	S	565S16.4	DAYLIGHT	24	LOW AREA			
16.6	S	565S16.6	DAYLIGHT	24	LOW AREA			
17.05	S	565S17.05	DAYLIGHT	15	SWALE		\checkmark	
17.15	Ν	565N17.15	HEADWALL	15	NEAR SURFACE WA		\checkmark	

County Outfall Inventory by District - Annual Maintenance

Distrie	ct: Vo	ernon						
CR 64	2			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.1	Е	642E1.1	WINGWALL	15	NEAR SURFACE WA			
1.1	W	642W1.1	WINGWALL	15	NEAR SURFACE WA			
1.13	Е	642E1.13	WINGWALL	15	NEAR SURFACE WA			
1.13	W	642W1.13	WINGWALL	15	NEAR SURFACE WA			
2.1	Е	642E2.1	DAYLIGHT	15	LOW AREA			
CR 64	4			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
1.04	W	644W1.04	Headwall		HEADWALL			
1.112	W	644W1.112	Headwall	18	HEADWALL			
C R 66	7			Outf	all Data	Cross	Needs	Needs
MM	Dir	Outfall ID	End Style	Size	Location	Drain	Cleaned	Repair
0.45	Ν	667N0.45	DAYLIGHT	15	SCOUR HOLE			
0.45	S	667S0.45	DAYLIGHT	18	LOW AREA			
0.55	Ν	667N0.55	DAYLIGHT	15	SURFACE WATER			
0.62	Ν	667N0.62	DAYLIGHT	18	SURFACE WATER			
0.621	0	667N0.621	DAYLIGHT	18	SURFACE WATER			
0.7	S	667S0.7	DAYLIGHT	12	LOW AREA			
1.2	S	667S1.2	DAYLIGHT	15	SWALE			
1.3	W	667W1.30	DAYLIGHT	12	SWALE			
1.73	S	667S1.73	DAYLIGHT	15	SWALE			
1.83	S	667S1.83	UNKNOWN	18	LOW AREA			
1.85	S	667S1.85	DAYLIGHT	15	LOW AREA			
1.9	S	667S1.90	UNKNOWN	15	LOW AREA			
1.95	S	667S1.95	DAYLIGHT	15	LOW AREA			
2.05	S	667S2.05	UNKNOWN	15	LOW AREA			
2.05	S	667S2.05	UNKNOWN	15	SURFACE WATER			

Major Projects

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887 Provide the following information for each new development or redevelopment project that is regulated by the Highway Permit, and not exempted under N.J.A.C. 7:8-1.6(b). After a project is listed in an annual report as completely constructed, do not include that project in subsequent annual reports.

Project Name Municipality/County ¹	Description (e.g., new alignment, widening, etc.)	Acres of Disturbance ²	Acres of Add'l Imperv. Surface ²	LURP Permit Required? (Y, P, N) ³	Design Checklist for Individual Projects Completed? (Y/N)	Waiver Claimed Under N.J.A.C. 7:8-5.2(e)? (Y/N)	Approved for Construction? (Y/N)	Construction Completed? (Y/N)
Bridge D-21 Frankford	Bridge Rehab	0	0.0	Y	Y	Ν	Y	Ν
Bridge X-09 Wantage Twp	Bridge Replacement	0.934	0.032	Y	Y	N	Y	Ν
Bridge O-07 Ogdensburg Boro	Bridge Replacement	0.466	0.053	Y	Y	N	Y	Y
			0.00					
Bridge C-17 Byram Twp	Bridge Replacement	0.178	0.053	Y	Y	Ν	Y	Y
Bridge C-18 Byram Twp	Bridge Repairs (Under Design)	TBD	0.00	Y	Y	Ν	N	N
			0.00	Y	Y	Ν	Y	Y
Bridge X-11 Wantage Twp	Bridge Rehab (Under Design)	0.118	0.00	Y	Y	Ν	N	Ν
Bridge X-08 Wantage Twp	Bridge Repairs (Under Design)	0.078	0.00	Y	Y	Ν	Y	Y
Bridge B-10 Branchville	Bridge Super Repair	0.040	0.00	Y	Y	Ν	N	Ν
Bridge Q-06 Sparta Twp	Bridge Rplcmnt (under Design)	TBD	TBD	Y	Y	Ν	N	Ν

¹Omit county if the Highway Agency is a county, or operates in only one New Jersey county ²Add "(est.)" after number of acres, if number of acres is estimated, approximate, or preliminary ³"LURP Permit Required" means that an NJDEP Land Use Regulation Program permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) has been or must be secured for the project.

Y = entire project requires a LURP Permit

P = part of the project requires a LURP Permit

N = none of the project requires a LURP Permit

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency: <u>County of Sussex</u>

NJPDES # : NJG<u>0149730_</u>PI ID #: <u>222158</u>

Team Member: Bill Koppenaal

Date: <u>April 17, 2018</u> Effective Date of Permit Authorization (EDPA): <u>April 1, 2004</u>

1. Location of Project

- a. Project Name <u>Bridge D-21 Superstructure Replacement</u>
- b. Highway Agency Project Number (if applicable): _____
- c. Road Name(s) (if applicable): <u>Armstrong Road</u>
- d. Municipality(ies): Frankford
- e. County(ies): <u>Sussex</u>

Highway Agency Information

2. Description (type of project)

a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): *Bridge Superstructure Replacement*

b. Area of proposed disturbance: <u>0.10</u> acres (include disturbance for easements, on/off ramps, etc. that are part of the project)

c. Area of proposed additional impervious surface: <u>0</u> acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)

d. Discharges to (identify surface water body(ies)): <u>N/A</u>

3. Related NJDEP Permits
How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?
Application Number (if available)
Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3
Answer (check one): The entire project Part of the project None of the project
4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)
Does the Project Fall under the definition of a Major Development and as such subject to the
performance standards? Y (\Box) N (\boxtimes)
Major Development: Disturbance of more than 1 acre or more acres of land or increasing impervious surface by
one-quarter acre or more.
a. Nonstructural stormwater management strategies
To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? Y (\Box) N (\Box)
Also see question #4.j in regard to the Low Impact Development Checklist.
b. Threatened and endangered species
Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly <i>Helonias bullata</i> (swamp pink) and/or <i>Clemmys muhlnebergi</i> (bog turtle)? Y (_) N (_)
c. Exemption for certain utility line and public pedestrian access projects
How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y (\Box) N (\Box) If "yes," check whichever of the following are applicable:
The entire project Part of the project None of the project
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Underground utility line Aboveground utility line Public pedestrian access
If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.
d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y (\Box) N (\Box) If "yes":
Check whichever of the following are applicable: Enlargement of existing public roadway or railroad Public pedestrian access
• Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).
Check whether the waiver is for:
The entire project Part of the project None of the project
If you checked "The entire project," skip questions #4.f, #4.g, and #4.h.
e. Erosion control
Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y (\Box) N (\Box)
Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y (\Box) N (\Box) If "no, " please explain:
f. Groundwater recharge
Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?
Answer (check one):
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Urban redevelopment area High pollutant loading area Industrial "source material"
If you checked "Part of the project" or "None of the project," is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y (\Box) N (\Box) Also see question 4.j.
Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to "source material"? Y (\Box) N (\Box)
Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y (\Box) N (\Box)
g. Stormwater runoff quantity
Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y (\Box) N (\Box)
If "no," is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3?

Y () N () Also see question 4.j.
h. Stormwater runoff quality
Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y (\Box) N (\Box)
If "yes," is the project designed to meet this requirement? Y (\Box) N (\Box) Also see question 4.j.
If "no," check whichever of the following are applicable:
Less than ¼ acre of additional impervious surface
Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y () N ()
Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y (\Box) N (\Box) N/A (\Box) (N/A if there is no stormwater runoff from the project to FW1 waters)
Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y () N () Also see question 4.j.
If "yes," has the NJDEP approved the proposed encroachment? Y (\Box) N (\Box) Please explain if the NJDEP has not approved the proposed encroachment:
i. Other special circumstances
Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y (\Box) N (\Box)
If "yes," describe the circumstances and identify the standard(s) that are not applicable:
j. Calculations and stormwater engineering report
Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y (\Box) N (\Box)
Attach a stormwater engineering report that includes the following information (unless the <u>Exception</u> below applies):
 A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
• A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
• Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.
<u>Exception</u> : If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y (\Box) N (\Box)

4

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y (\Box) N (\Box)

I. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y (\square) N (\square)

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y (\Box) N (\boxtimes)

If "yes," is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y (\Box) N (\Box)

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y (\Box) N (\boxtimes) If "yes," please explain:

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency: County of Sussex

NJPDES # : NJG<u>0149730</u> PI ID #: <u>222158</u>

Team Member: Bill Koppenaal

Date: _____Effective Date of Permit Authorization (EDPA): <u>April 1, 2004</u>

1. Location of Project

- a. Project Name <u>Bridge X-09 Replacement</u>
- b. Highway Agency Project Number (if applicable):
- c. Road Name(s) (if applicable): <u>County Route 565</u>
- **d.** Municipality(ies): <u>Wantage Township</u>
- e. County(ies): <u>Sussex</u>

Highway Agency Information

2. Description (type of project)

a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): *Bridge Replacement*

b. Area of proposed disturbance: <u>0.934</u> acres (include disturbance for easements, on/off ramps, etc. that are part of the project)

c. Area of proposed additional impervious surface: <u>0.032</u> acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)

d. Discharges to (identify surface water body(ies)): <u>*Papakating Creek*</u>

3. Related NJDEP Permits
How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?
Application Number (if available)
Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.1924-16-0008.1Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.1924-16-0008.1Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq
Answer (check one): The entire project Part of the project None of the project
4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)
Does the Project Fall under the definition of a Major Development and as such subject to the
performance standards? $Y(\Box) N(\boxtimes)$
Major Development: Disturbance of more than 1 acre or more acres of land or increasing impervious surface by
one-quarter acre or more.
a. Nonstructural stormwater management strategies
To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? $Y(\Box) N(\Box)$
Also see question #4.j in regard to the Low Impact Development Checklist.
b. Threatened and endangered species
Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly <i>Helonias bullata</i> (swamp pink) and/or <i>Clemmys muhlnebergi</i> (bog turtle)? Y (_) N (_)
c. Exemption for certain utility line and public pedestrian access projects
How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y (\Box) N (\Box) If "yes," check whichever of the following are applicable:
The entire project Part of the project None of the project
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Underground utility line Aboveground utility line Public pedestrian access
If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.
d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":
Check whichever of the following are applicable: Enlargement of existing public roadway or railroad Public pedestrian access
• Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).
Check whether the waiver is for:
The entire project Part of the project None of the project
If you checked "The entire project," skip questions #4.f, #4.g, and #4.h.
e. Erosion control
Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y (\Box) N (\Box)
Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y (\Box) N (\Box) If "no, " please explain:
f. Groundwater recharge
Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?
Answer (check one):
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Urban redevelopment area High pollutant loading area Industrial "source material"
If you checked "Part of the project" or "None of the project," is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y (\Box) N (\Box) Also see question 4.j.
Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to "source material"? Y (\Box) N (\Box)
Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y (\Box) N (\Box)
g. Stormwater runoff quantity
Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y (\Box) N (\Box)
If "no," is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3?

$Y(\Box) N(\Box)$ Also see question 4.j.
h. Stormwater runoff quality
Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y (\Box) N (\Box)
If "yes," is the project designed to meet this requirement? Y (\Box) N (\Box) Also see question 4.j.
If "no," check whichever of the following are applicable:
Less than 1/4 acre of additional impervious surface
Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y (\Box) N (\Box)
Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y (\Box) N (\Box) N/A (\Box) (N/A if there is no stormwater runoff from the project to FW1 waters)
Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y (\Box) N (\Box) Also see question 4.j.
If "yes," has the NJDEP approved the proposed encroachment? $Y(\square) N(\square)$ Please explain if the NJDEP has not approved the proposed encroachment:
i. Other special circumstances
Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y (\Box) N (\Box)
If "yes," describe the circumstances and identify the standard(s) that are not applicable:
j. Calculations and stormwater engineering report
Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y (\Box) N (\Box)
Attach a stormwater engineering report that includes the following information (unless the <u>Exception</u> below applies):
 A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
• A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
• Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.
<u>Exception</u> : If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y (\Box) N (\Box)

4

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y (\Box) N (\Box)

I. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y (\square) N (\square)

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y (\Box) N (\boxtimes)

If "yes," is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y (\Box) N (\Box)

Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y (\boxtimes) N (\square) If "yes," please explain:

5

Highway Agency Stormwater General Permit Post-Construction Program Design Checklist for Individual Projects

For each question, attach additional sheets as necessary

Highway Agency: County of Sussex

NJPDES # : NJG<u>0149730</u> PI ID #: <u>222158</u>

Team Member: Bill Koppenaal

Date: _____Effective Date of Permit Authorization (EDPA): <u>April 1, 2004</u>

1. Location of Project

- a. Project Name <u>Bridge X-11 Wantage Township</u>
- b. Highway Agency Project Number (if applicable):
- c. Road Name(s) (if applicable): County Route 639
- **d.** Municipality(ies): <u>Wantage Township</u>
- e. County(ies): <u>0.Sussex</u>

Highway Agency Information

2. Description (type of project)

a. New alignment, widening, bridge replacement, intersection improvement, or other (describe): *Bridge Rehabilitation*

b. Area of proposed disturbance: <u>0.118</u> acres (include disturbance for easements, on/off ramps, etc. that are part of the project)

c. Area of proposed additional impervious surface: <u>0.000</u> acres (include proposed additional impervious surface for easements, on/off ramps, etc. that are part of the project)

d. Discharges to (identify surface water body(ies)): <u>N/A</u>

3. Related NJDEP Permits
How much (if any) of the project requires at least one NJDEP permit (stream encroachment permit; freshwater wetlands permit or transition area waiver; CAFRA, coastal wetlands, or waterfront development permit) granted under the following statutes?
Application Number (if available)
Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq.Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-3
Answer (check one): The entire project Part of the project None of the project
4. Compliance with NJDEP Design and Performance Standards (N.J.A.C. 7:8)
Does the Project Fall under the definition of a Major Development and as such subject to the
performance standards? $Y(\Box) N(\Box)$
Major Development: Disturbance of more than 1 acre or more acres of land or increasing impervious surface by
one-quarter acre or more.
a. Nonstructural stormwater management strategies
To the maximum extent practicable, does the project meet the applicable erosion control, groundwater recharge, and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 by incorporating nonstructural stormwater management strategies at N.J.A.C. 7:8-5.3 into the design? $Y(\Box) N(\Box)$
Also see question #4.j in regard to the Low Impact Development Checklist.
b. Threatened and endangered species
Are the project's stormwater management measures designed to avoid adverse impacts of concentrated flow on habitat for threatened and endangered species as documented in the Natural Heritage Database established under N.J.S.A. 13:1B-15.147 through 15.150, particularly <i>Helonias bullata</i> (swamp pink) and/or <i>Clemmys muhlnebergi</i> (bog turtle)? Y (_) N (_)
c. Exemption for certain utility line and public pedestrian access projects
How much (if any) of the project is exempt under N.J.A.C. 7:8-5.2(d) from the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y (\Box) N (\Box) If "yes," check whichever of the following are applicable:
The entire project Part of the project None of the project
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Underground utility line Aboveground utility line Public pedestrian access
If you checked "The entire project," skip questions #4.d, #4.f, #4.g, and #4.h.
d. Waiver for certain roadway, railroad, and public pedestrian access projects

Are you claiming, for the enlargement (widening) of an existing public roadway or railroad or the construction or enlargement of a public pedestrian access, a waiver under N.J.A.C. 7:8-5.2(e) from strict compliance with the groundwater recharge and stormwater runoff quantity and quality requirements at N.J.A.C. 7:8-5.4 and 5.5? Y () N () If "yes":
Check whichever of the following are applicable: Enlargement of existing public roadway or railroad Public pedestrian access
• Attach written documentation making the demonstration required under N.J.A.C. 7:8-5.2(e), unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit this documentation to the NJDEP to obtain the related NJDEP permit(s).
Check whether the waiver is for:
The entire project Part of the project None of the project
If you checked "The entire project," skip questions #4.f, #4.g, and #4.h.
e. Erosion control
Is the project in its post-construction condition designed to meet the erosion control standards established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq. and implementing rules? Y (\Box) N (\Box)
Does the project have a soil erosion and sediment control plan certified under that Act and those rules? Y (\Box) N (\Box) If "no, " please explain:
f. Groundwater recharge
Under N.J.A.C. 7:8-5.4(a)2ii, how much (if any) of the project is outside the scope of the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i?
Answer (check one):
If you checked "The entire project" or "Part of the project," check whichever of the following are applicable:
Urban redevelopment area High pollutant loading area Industrial "source material"
If you checked "Part of the project" or "None of the project," is the project designed to meet the groundwater recharge requirement at N.J.A.C. 7:8-5.4(a)2i? Y (\Box) N (\Box) Also see question 4.j.
Will there be recharge of any stormwater from high pollutant loading areas, or of industrial stormwater exposed to "source material"? Y (\Box) N (\Box)
Is the project designed to avoid adverse hydraulic impacts on the groundwater table? Y (\Box) N (\Box)
g. Stormwater runoff quantity
Will the post-construction stormwater runoff flow only into tidal waters where the increased volume of stormwater runoff will not increase flood damages below the point of discharge? Y (\Box) N (\Box)
If "no," is the project designed to meet the stormwater runoff quantity standard at N.J.A.C. 7:8-5.4(a)3?

$Y(\Box) N(\Box)$ Also see question 4.j.
h. Stormwater runoff quality
Is the project subject to the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent total suspended solids (TSS) reduction? Y (\Box) N (\Box)
If "yes," is the project designed to meet this requirement? Y (\Box) N (\Box) Also see question 4.j.
If "no," check whichever of the following are applicable:
Less than 1/4 acre of additional impervious surface
Is the project designed to meet the nutrient reduction standard at N.J.A.C. 7:8-5.5(e)? Y (\Box) N (\Box)
Are the project's stormwater management measures designed to prevent any increase in stormwater runoff to waters classified as FW1? Y (\Box) N (\Box) N/A (\Box) (N/A if there is no stormwater runoff from the project to FW1 waters)
Does the project propose any encroachment within a special water resources protection area established under N.J.A.C. 7:8-5.5(h) to protect Category One waters? Y (\Box) N (\Box) Also see question 4.j.
If "yes," has the NJDEP approved the proposed encroachment? $Y(\square) N(\square)$ Please explain if the NJDEP has not approved the proposed encroachment:
i. Other special circumstances
Are there special circumstances besides those noted above (e.g., alternative design and performance standards recognized under N.J.A.C. 7:8-5.1(b), and hardship waivers under N.J.A.C. 7:13-4.8) that result in one or more of the design and performance standards at N.J.A.C. 7:8-5 not being applicable to all or part of the project? Y (\Box) N (\Box)
If "yes," describe the circumstances and identify the standard(s) that are not applicable:
j. Calculations and stormwater engineering report
Was stormwater runoff calculated in accordance with N.J.A.C. 7:8-5.6? Y (\Box) N (\Box)
Attach a stormwater engineering report that includes the following information (unless the <u>Exception</u> below applies):
 A copy of Parts 1, 3, and 4 of the Low Impact Development Checklist (see Appendix A of the New Jersey Stormwater Best Management Practices Manual)
• A copy of a USGS topographical map(s), 7.5 minute quadrangle series, showing the project location and its HUC-14 watershed(s), and indicating any special water resources protection area(s) established under N.J.A.C. 7:8-5.5(h)
• Proof that the applicable groundwater recharge and stormwater runoff quantity and quality standards at N.J.A.C. 7:8-5.4 and 5.5 (or applicable alternative standards recognized under N.J.A.C. 7:8-5.1(b)) are met. This proof shall include complete printouts of all calculations (including detention, retention, and infiltration calculations for all basins), and shall compare existing and proposed recharge and discharge rates. The proof shall clearly explain how the attached calculations demonstrate compliance with the applicable standards. If the requirement at N.J.A.C. 7:8-5.5(a) for 80 percent TSS reduction is applicable, the proof shall detail how TSS reduction is achieved.
<u>Exception</u> : If "The entire project" is checked under question #3, have you submitted or will you submit the above information to the NJDEP to obtain the related NJDEP permit(s)? Y (\Box) N (\Box)

4

If "yes," it is not necessary to attach a stormwater engineering report.

k. Structural stormwater management

Is the project designed to meet the applicable standards for structural stormwater management measures at N.J.A.C. 7:8-5.7? Y (\Box) N (\Box)

I. Maintenance

Has the design engineer prepared for the project the maintenance plan required by N.J.A.C. 7:8-5.8? Y (\square) N (\square)

If "yes," attach the maintenance plan unless "The entire project" or "Part of the project" is checked under question #3, and you have submitted or will submit the maintenance plan for the entire project to the NJDEP to obtain the related NJDEP permit(s).

5. Compliance with NJDEP Design Standard for Storm Drain Inlets

Does the project include installation of any storm drain inlets? Y (\Box) N (\boxtimes)

If "yes," is the project designed to comply with the standard set forth in Attachment C of the permit to control passage of solid and floatable materials? Y (\Box) N (\Box)

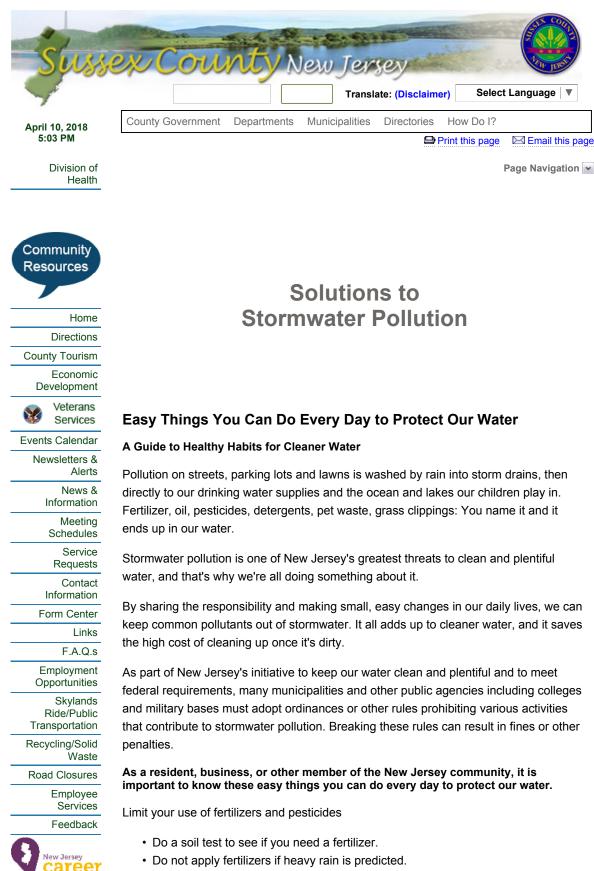
Attach a list of any storm drain inlets in the project that have hydraulic performance exemptions.

Are you claiming any alternative device exemptions or historic place exemptions for any of the storm drain inlets in this project? Y (\Box) N (\boxtimes) If "yes," please explain:

5

Public Information

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887



· Look into alternatives for pesticides.

connections

- Maintain a small lawn and keep the rest of your property or yard in a natural state with trees and other native vegetation that requires little or no fertilizer.
- If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply it.

Make sure you properly store or discard any unused portions.

Properly use and dispose of hazardous products

- Hazardous products include some household or commercial cleaning products, lawn and garden care products, motor oil, antifreeze, and paints.
- Do not pour any hazardous products down a storm drain because storm drains are usually connected to local waterbodies and the water is not treated.
- If you have hazardous products in your home or workplace, make sure you store or dispose of them properly. Read the label for guidance.
- · Use natural or less toxic alternatives when possible.
- · Recycle used motor oil.
- Contact your municipality, county or facility management office for the locations of hazardous-waste disposal facilities.

Keep pollution out of storm drains

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

Don't litter

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

Dispose of yard waste properly

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

Clean up after your pet

- Many municipalities and public agencies must enact and enforce local pet-waste rules.
- An example is requiring pet owners or their keepers to pick up and properly dispose of pet waste dropped on public or other people's property.



- Make sure you know your town's or agency's requirements and comply with them. It's the law. And remember to:
- Use newspaper, bags or pooper-scoopers to pick up wastes.
- Dispose of the wrapped pet waste in the trash or unwrapped in a toilet.
- Never discard pet waste in a storm drain.

Don't feed wildlife

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

Contact information

For more information on stormwater related topics, visit www.njstormwater.org Additional information is also available at U. S. Environmental Protection Agency Web sites www.epa.gov/npdes/stormwater or www.epa.gov/nps

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

Information on this page available in this printable brochure.

www.cleanwaternj.org 🗗

Community Resources | Home | County Government | Departments | Municipalities | Directories | Directions | County Tourism | Economic Development | Veterans Services | Events Calendar | Newsletters & Alerts | News & Information | Meeting Schedules | Service Requests | Contact Information | Form Center | Links | F.A.Q.s | Employment Opportunities | Skylands Ride/Public Transportation | How Do I? | Recycling/Solid Waste | Road Closures | Employee Services | Feedback | New Jersey Career Connections

Use Mobile Site

Copyright © 2018 Sussex County. All Rights Reserved.





Annual Fee & Payment Data

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887 NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL REGULATION-NJPDES

Let's protect our earth

(

INVOICE NO. 190439450

Program Inte	erest	Тур	e of N	otice			Αποι	int Due
USSEX CNTY		ORIGINAL(NON-)		AL)		\$	5	,100.00
SPRING ST								
ewton, NJ. 07860		Billing Date		Due Da	te	NJE	EMS Bill	ID
222158		05/10/19		06/ <mark>1</mark> 9/	19	00000	019570	8400
		Summary	/					
Total Amount Assessed						4	!	5,100.00
Amount Received Before Cre	ating Installment Plan	n (if installment plans is a	allowed)				0.00
Amount Transferred To Instal	llment Plan							0.00
Installment Amount								0.00
Total Amount Credited								0.00
Total Amount Debited (Other	Than Amounts Asses	ssed)						0.00
Total Amount Due								5,100.00
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAY TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE 1 D PROGRAM INTEREST	OR CREDIT CARD USE,1 TO TREASURER-STATE ON NUMBER ON CHECK.	HE TOP- .9% OF F NEW	THE TOTA	L + \$1]	THIS BIL S CHARGE	L. D.	
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAY TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER ANI RETURN CHECK WITH BOTTOM	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST M PORTION OF THIS T EE BACK OF INVOICE	R THAT IS FOUND AT T DR CREDIT CARD USE,1 FO TREASURER-STATE O NUMBER ON CHECK. ENVOICE TO THE NJ DE	HE TOP- .9% OF F NEW PARTMEN TION.	THE TOTA JERSEY. NT OF TRE	L + \$1]	THIS BIL S CHARGE	L. D.	
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYS TO PAY BILL BY MAIL SENI	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST M PORTION OF THIS T EE BACK OF INVOICE	R THAT IS FOUND AT TO DR CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA	HE TOP- .9% OF F NEW PARTMEN TION.	THE TOTA JERSEY. NT OF TRE	L + \$1]	THIS BIL S CHARGE	L. D.	
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENT WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTON IF YOU HAVE QUESTIONS SE	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST M PORTION OF THIS T EE BACK OF INVOICE	R THAT IS FOUND AT TO DR CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA	HE TOP- .9% OF F NEW PARTMEN TION.	THE TOTA JERSEY. NT OF TRE	L + \$1]	THIS BIL S CHARGE	L. D.	D9901F (R 3/1
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTON IF YOU HAVE QUESTIONS SE IVOICE NO. 20439450 Sprotectourearth	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST M PORTION OF THIS J EE BACK OF INVOICE Se	R THAT IS FOUND AT TH OR CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA Be Back Of Page for Billing	HE TOP. .9% OF F NEW . PARTMEN TION.	THE TOTA JERSEY. NT OF TRE	L + \$1] ASURY.	S CHARGE	D.	
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTON IF YOU HAVE QUESTIONS SE VOICE NO. 20439450 Sprotect gure arth	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTM	THAT IS FOUND AT TO CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA Be Back Of Page for Billing MENT OF ENVIRO	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries	THE TOTA JERSEY. NT OF TRE	L + \$1] ASURY.	S CHARGE	D. 	D9901F (R 3/14 NVOICE NO. 90439450
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTON IF YOU HAVE QUESTIONS SE VOICE NO. 20439450 Sprotect our earth	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTM	R THAT IS FOUND AT TH OR CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA Be Back Of Page for Billing	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries	THE TOTA JERSEY. NT OF TRE	L + \$1] ASURY.	S CHARGE	D. 	NVOICE NO. 90439450
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTON IF YOU HAVE QUESTIONS SE VOICE NO. 20439450 Sprotect our earth	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTM	THAT IS FOUND AT TO CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA Be Back Of Page for Billing MENT OF ENVIRO	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries	THE TOTA JERSEY. NT OF TRE	L + \$1] ASURY.	S CHARGE	D. 1 1 NJE	NVOICE NO. 90439450
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYI TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE NOVOICE NO. 20439450 Sprotectourearth NEW JE Program Interest ID	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE SE RSEY DEPARTM ENVIRONME	THAT IS FOUND AT TI R CREDIT CARD USE,1 TO TREASURER-STATE O NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA BOD BACK OF Page for Billing MENT OF ENVIRO ENTAL REGULATI TO NOTICE	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI	ASURY.	S CHARGE	D. 1 NJE 000000	NVOICE NO. 90439450 MS Bill ID 019570840 punt Due
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENT WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE IVOICE NO. 20439450 Sprotect our earth NEW JE	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTM ENVIRONME	THAT IS FOUND AT TI R CREDIT CARD USE,1 TO TREASURER-STATE O NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA BOD BACK OF Page for Billing MENT OF ENVIRO ENTAL REGULATI TO NOTICE	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI JPDES illing Dat 5/10/19	ASURY. ASURY. ROTEC B Due 06/	S CHARGE TION	D. 1 1 00000	NVOICE NO. 90439450 MS Bill ID 019570840 punt Due
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE NVOICE NO. 90439450 Isprotectourearth NEW JE Program Interest ID	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTN ENVIRONME	THAT IS FOUND AT TI R CREDIT CARD USE,1 TO TREASURER-STATE O NUMBER ON CHECK. INVOICE TO THE NJ DE FOR CONTACT INFORMA BOD BACK OF Page for Billing MENT OF ENVIRO ENTAL REGULATI TO NOTICE	HE TOP- .9% OF F NEW . PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI JPDES illing Dat 5/10/19	ASURY. ASURY. ROTEC	S CHARGE TION	D. 1 1 000000 \$	90439450 MS Bill ID 019570840
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SEMI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE VOICE NO. 20439450 Sprotectourearth NEW JE Program Interest ID 222158 name and/or address age, check box and write actions on the back of this	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE Se RSEY DEPARTN ENVIRONME	THAT IS FOUND AT THE OR CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DEL FOR CONTACT INFORMA BE Back Of Page for Billing MENT OF ENVIRO ENTAL REGULATI	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE JUDES JPDES illing Dat 5/10/19	ASURY. ASURY. ROTEC e Due 06/ Enter the of your pa	S CHARGE TION	D. 1 1 000000 \$ \$	NVOICE NO. 90439450 MS Bill ID 01957084 punt Due
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE NOVOICE NO. 20439450 Sprotectourearth NEW JE Program Interest ID 222158 name and/or address nge, check box and write ections on the back of this ice.	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS I EE BACK OF INVOICE SE RSEY DEPARTM ENVIRONME 	R THAT IS FOUND AT TH R CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DEF FOR CONTACT INFORMAT BODE Back Of Page for Billing MENT OF ENVIRO ENTAL REGULATI NOT FOLD, BEN RETURN	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI JPDES illing Dat 5/10/19 MARK S POR	ASURY. ASURY. COTEC Due 06/ Enter the of your particular ION	S CHARGE TION	I NJE 000000 \$ \$ \$	NVOICE NO. 90439450 MS Bill ID 01957084 5,100.00 payable to:
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE NOOICE NO. 90439450 Sprotectourearth NEW JE Program Interest ID 222158 name and/or address nge, check box and write ections on the back of this lice.	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS J EE BACK OF INVOICE SE RSEY DEPARTN ENVIRONME 	R THAT IS FOUND AT TH R CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DEF FOR CONTACT INFORMAT BODE Back Of Page for Billing MENT OF ENVIRO ENTAL REGULATI NOT FOLD, BEN RETURN	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI JPDES illing Dat 5/10/19 MARK S POR	ASURY. ASURY. COTEC COTEC Enter the of your part REASURE INJ DEPA	S CHARGE	ID. INJE 000000 S Ineck made OF NEW S OF TREAS	NVOICE NO. 90439450 MS Bill ID 019570840 5,100.00 payable to: JERSEY
THE SYSTEM WILL ASK FOR THERE IS NO FEE FOR PAYJ TO PAY BILL BY MAIL SENI WRITE INVOICE NUMBER AND RETURN CHECK WITH BOTTOM IF YOU HAVE QUESTIONS SE NOICE NO. 90439450 Sprotect our earth NEW JE Program Interest ID 222158 name and/or address nge, check box and write ections on the back of this ide.	THE INVOICE NUMBER ING VIA E-CHECK; FC D A CHECK PAYABLE T D PROGRAM INTEREST 1 PORTION OF THIS J EE BACK OF INVOICE SE RSEY DEPARTM ENVIRONME DO DO DO DO L KOPPENAAL T	R THAT IS FOUND AT TH R CREDIT CARD USE,1 TO TREASURER-STATE OF NUMBER ON CHECK. INVOICE TO THE NJ DEF FOR CONTACT INFORMAT BODE Back Of Page for Billing MENT OF ENVIRO ENTAL REGULATI NOT FOLD, BEN RETURN	HE TOP- .9% OF F NEW PARTMEN TION. Inquiries NMEN ON-N	THE TOTA JERSEY. NT OF TRE NTAL PI JPDES illing Dat 5/10/19 MARK S POR	ASURY. ASURY. COTEC COTEC E Due 06/ Enter the of your particular EASURE id mail to: NJ DEPA DIVISION PO BOX 4	S CHARGE	ID. II II II II II II II II II II II II II	NVOICE NO. 90439450 MS Bill ID 01957084 0 unt Due 5,100.00 payable to: JERSEY

MAIL CODE 401-02B NJDEP DIV OF WATER QUALITY NJPDES PERMIT ADMINISTRATION PO BOX 420 TRENTON, NJ 08625-0420 ATTN: NJPDES PERMIT ADMIN -NJPDES FEES TELE: (609) 984-4428 FAX: (609) 777-0432 OR EMAIL: DWQ PAS@DEP.NJ.GOV

SAVE A STAMP - PAY ON LINE GO TO: HTTP://WWW.NJ.GOV/DEP/ONLINE/ SCROLL DOWN TO BOTTOM RIGHT CLICK ON: PAY A PAPER INVOICE ENTER INVOICE NUMBER FROM BILL NOTE: CERTAIN INVOICE AMOUNTS ARE RESTRICTED TO E-CHECK ONLY

D9901B (Rev 03-14-02)

gagdinaanii a an bad indi ada da

REQUESTED CHANGES TO INFORMATION FOR PRIMARY BILLING PARTY

Contact Organization: _____

Contact Person: _____

_____Phone No.:_____

none and a set of the set of the

Street Address:____

Postal City: _____ State: ____ Zip: _____

D9901B

.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INVOICE NO. 190439450

Let's protect our earth

ENVIRONMENTAL REGULATION-NJPDES

Program Interest		Type of Notic	e	Amount Due
SUSSEX CNTY	ORIGINAL	(NON-INITIAL)		\$ 5,100.00
1 SPRING ST				
Newton, NJ. 07860	Billing D	ate Du	le Date	NJEMS Bill ID
222158	05/10/	19 06	/19/19	000000195708400
Stormwater Discharge General Permit Autho Stormwater Discharge	rization Renew	al		
ASSESSMENTS				
Start-End Date: 07/01/2018-06/30/2019 Assessment Type: FEE(Annual Fee) Regulatory Basis: [N.J.A.C. 7:14A- 3.1	Activity: DST	090001 Altern Status: Open	ate ID: NJG (Pending Pa	yment)
Regulatory Basis: [N.J.A.C. 7:14A- 3.1	(a)9]			Amount: \$ 5100.00
		Tota	al Amount A	ssessed: \$ 5,100.00
,		·		
			1.1.1.1	
			- 1 a -	
	Page			D9902F (R 3/14

Annual Impacted Employee Training

(Represents general training provided to applicable DPW, OBTS, Engineering, and Fleet employees. Supplemented as needed on a case-by-case basis for specific tasks / needs)

Sussex County 2018 SPPP Highway Agency Stormwater Permit NJPDES Permit # NJ0141887

Stormwater Pollution Prevention & Best Mgt Practices

Sussex County

Richard M. Lynch, Ph.D. CIH, CMC, CMRS, CHFM

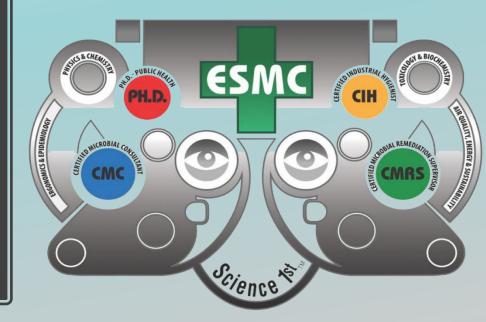
President Environmental Safety Management Corporation

www.esmcorp.com



AIR QUALITY, MOLD TESTING, ERGONOMICS, OSHA

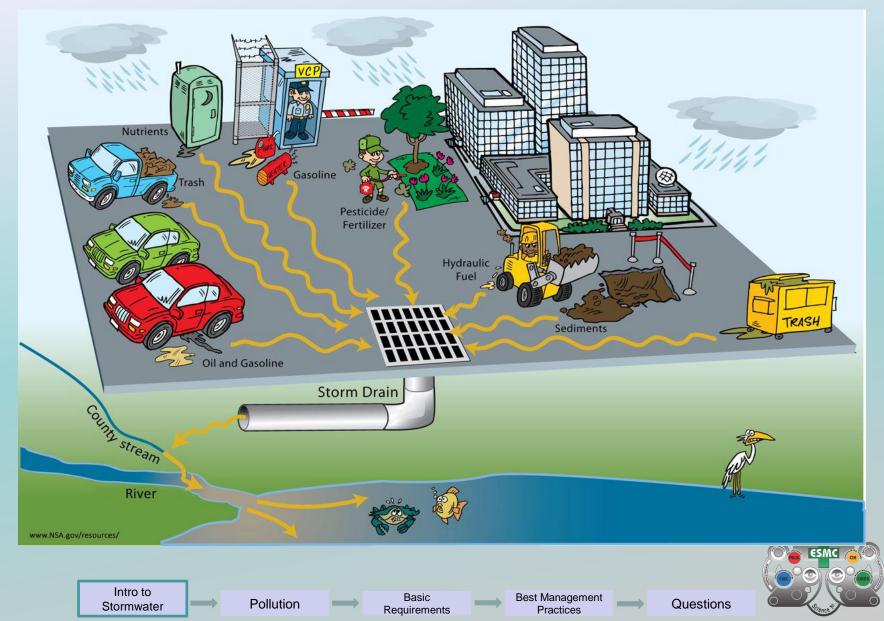
21 SCOTT STREET RVERSIDE, NJ 08075 TEL: (856) 764-3557 FAX: (856) 764-3558 WWW.ESMCORP.COM



Training Outline

Introduction to Stormwater	 Diagrams and Definitions 			
Stormwater Pollution	 Statistics Health Effects (Personal, Animal, Environmental) 			
Basic Requirements	 Federal/State Regulatory Compliance EPA, NJDEP, OSHA 			
Sussex County Best Management Practices	 General Housekeeping Vehicle and Equipment Fueling Vehicle Maintenance Equipment Cleaning Loading and Unloading Salt/De-Icing Storage Liquid, Solid and Waste Storage Spill Response 			
Questions				
Intro to Stormwater Pollution	n Basic Best Management Questions			

Introduction to Stormwater



Introduction to Stormwater

Basic

Requirements

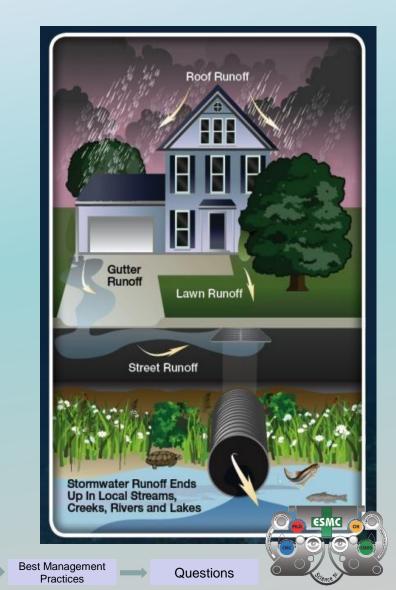
- Stormwater Water generated by rain or melted snow/ice that does not get filtered by soil or water treatment facilities. Typically seen on roof sidings, pavement, construction facilities, etc.
- Runoff Stormwater swept across impervious surfaces due to non-absorption.
- Pollutants Any chemical, mineral or waste product introduced to runoff that can cause adverse effects to the environment.
- MS4 Municipal Separate Storm Sewer System
- NJPDES New Jersey Pollution Discharge Elimination System

Pollution

Improper Disposal of Waste Impacts
 Stormwater, Surface and Groundwater
 Quality

Intro to

Stormwater



Stormwater Pollution

Basic

Requirements

Best Management

Practices

- One quart of oil can contaminate 250,000 gallons of water = 2 acres
- Animals' wings and fur are naturally waterproof and insulative; oil damages the separative barrier between the harsh elements and their insides. Death occurs through hypothermia or preening (grooming).

Pollution

- Detrimental to human health
 - Physical Contact
 - Environmental factors
 - Eating fish

Intro to

Stormwater

The second second	a a company
	C C SS
	>>> ANELESE
	A BUR 2
	Contraction of the
and the second second	
	A ST AR LORE
	83225
	The State State of the
	STREEP 22
A Dr	
A Alexandre	and
- PANKAV MARKA	
	a course
	L'AND A LONG
and the second second	And the second
the second second	Aller Aller

Questions



Potential Stormwater Contamination by County Activities Contamination of Waterways by:

- Waste Oil Runoff
- Gasoline or Oil Spills at Fueling Stations
- Salt Contamination of soils and surface water
- Fertilizers and Pesticide Spills
- Soaps and Detergents in Storm Sewers and Surface Waters
- Asphalt, Concrete and Cold Patch leachate



Stormwater Pollution

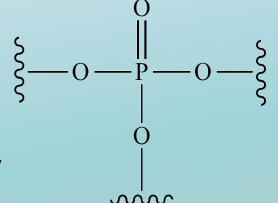
Phosphates (Detergents)

Phosphates are often used in heavy soaps and detergents

- Drastically increases algae
- Depletes oxygen

Stormwater

- Pollutes food supply and water supply
 - Rashes, liver illness, respiratory and neurological problems





Requirements

Practices



Stormwater Pollution (Acidification and De-Icers)

- Acidification of soils and surface waters as a result of elevated sulphur (S) and nitrogen (N) deposition has been widely documented from many sites in Europe and North America
- The <u>acidification</u> process is related to <u>leaching</u> of atmospheric-derived <u>sulphate</u> (SO₄²⁻) and excess <u>nitrate</u> (NO₃⁻) from soils to surface waters.
- In acid-sensitive ecosystems with slow-weathering bedrock and limited or depleted pools of base cations, SO₄²⁻ and NO₃⁻ in <u>runoff</u> will be accompanied by acidifying <u>hydrogen ions</u> (H⁺) and inorganic aluminium (Al_i) that are toxic for many <u>aquatic organisms</u>.
- De-Icer Contamination to water, soils and vegetation

Stormwater Pollution (Total Suspended Solids)

Cause increased turbidity, which can significantly impact surface water ecology;

- reduction of light penetration,
- clogging of gills
- smothering of benthic communities,
- alteration of substrate, filling in channels and ponds.

Additionally, TSS may also include toxins and metals, further impacting the aquatic ecosystem.

Stormwater Pollution (Nutrients)

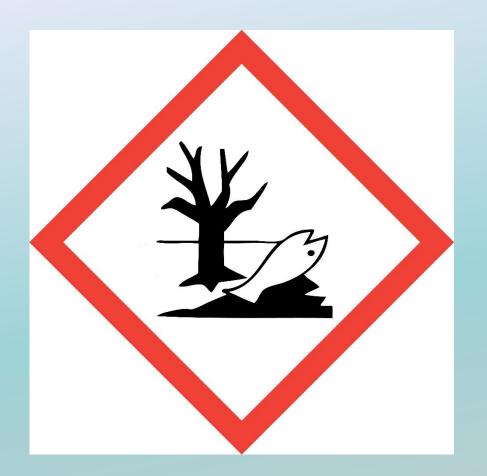
- Nutrients in stormwater runoff are generally a result of agriculture, fertilizers used on lawns and animal waste.
- Phosphorous and Nitrogen are main nutrients of concern in stormwater:
- Phosphorous and nitrogen over-stimulate plant growth in the aquatic environment, resulting in dense algal blooms. When the algae die, microorganisms break down the organic matter, consuming large amounts of oxygen in the process and reducing the dissolved oxygen concentration of the water.
- This process, known as eutrophication, can result in water discoloration, strong odors and the release of toxins.

Stormwater Pollution

Other common worksite pollutants

Basic

Requirements



Pollution

Intro to

Stormwater

- Sediment
- Grease
- Pesticides
- Chlorine
- Gasoline
- Paint
- Plastic
- Animal Waste

Questions

Best Management

Practices



Regulatory Requirements

Basic

Requirements





STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION NJ STORMWATER.ORG

Stormwater in New Jersey



Intro to

Stormwater

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

- NJ Department of **Environmental Protection** NJAC 7:14-25
- https://www.cleanwaternj. org/posters.htm
- Sussex County Storm Water Pollution **Prevention Program**
- Sussex County Best Management Practices

Questions

Best Management

Practices



Pollution

Statewide Basic Requirements

- 1. Comply with public notice requirements when providing for public participation in stormwater programs
- 2. Construction Site Stormwater runoff Control
 - 1. Responsible for creating and enforcing stormwater pollution prevention program
- 3. New and redevelopment areas
 - 1. Comply with State Regulations
 - 2. Any new or redevelopment of more than 1 acre needs a program to address stormwater runoff

Basic

Requirements

Best Management

Practices

4. Inform public about impacts of improper discharges

Pollution

- 1. Employees, Local Businesses and General Public
- 5. Prohibit improper disposal of Waste
 - 1. Create Map of MS4s Outfall Pipes
- 6. Control Solid and Floatable Materials

Intro to

Stormwater



Statewide Basic Requirements

- 7. Maintenance Yards and Highway Service Areas
 - 1. Develop and implement operations and maintenance program to prevent or reduce runoff pollution
- 8. Conduct Employee Training to reduce or prevent stormwater pollution



Basic

Requirements

Pollution

Best Management

Practices

Intro to

Stormwater



Sussex County Best Management Practices

Basic

Requirements

Intro to

Stormwater

_

Pollution

Best Management

Practices



Activities, Prohibitions, Procedures

Prevent or reduce the release of pollutants to surface waters

Basic

Requirements

Pollution

- 1. General Housekeeping
- 2. Vehicle and Equipment Fueling
- 3. Vehicle Maintenance, Inspection and Repair
- 4. Vehicle and Equipment Cleaning

Intro to

Stormwater

- 5. Loading and Unloading of Materials
- 6. Salt/De-icing and Raw Materials Storage
- 7. Storage of Liquids, Solid Waste and Hazardous Materials
- 8. Spill Response

Best Management

Practices



Basic

Requirements

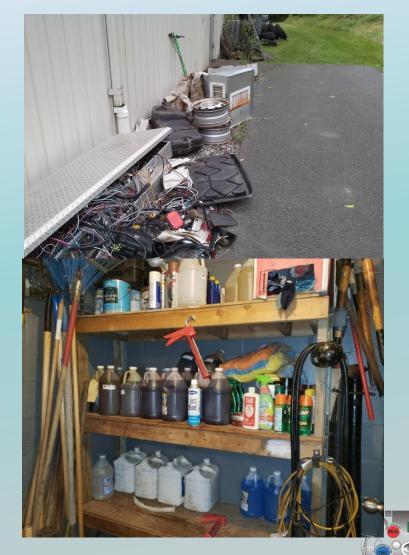
1. General Housekeeping

- Keep all facilities and storage areas clean
- Label, organize and tightly seal materials
- Store materials indoors
- Conduct regular inspections
- Spill kits should be easily accessible

Stormwater

- Collect and dispose
 waste/recycling appropriately
- Outdoor Refuse containers shall always be covered and managed to prevent spilling
 - exceptions for temporary demolition containers, litter receptacles, and containers which hold large bulky items

Pollution



Best Management

Practices

2. Vehicle and Equipment Fueling

- Provide ample and accessible supply of spill kits
- Emergency Shut-off Nozzles
- Clearly display Safe-Fueling instructions
- Equip fluid storage drums with spill containment dikes protecting from runoffs and spills
- Dual Wall Storage Systems
- Follow regular vehicle fueling procedure
 - Shut the engine off
 - Ensure that the fuel is the proper type
 - Eliminate all Ignition Sources and Prohibit Smoking
 - Fuel tanks shall not be "topped off."
 - Report Any Spills to the Number Posted the Fueling Sign
- Minimize Mobile Fueling
- Rapidly and effectively respond to spills



Intro to Stormwater

Pollution

Basic Requirements Best Management Practices

Basic

Requirements

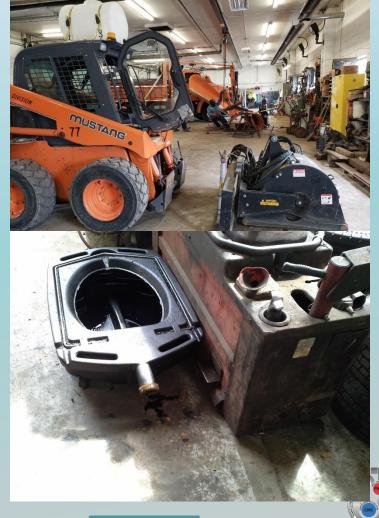
3. Vehicle Maintenance, Inspection and Repair

- Proper Site Preparation
 - Vehicle Maintenance areas protected from storm water run-on and runoff
 - Located Downstream of drainage facilities
 - Ample and accessible supply of spill kits
- Conduct vehicle maintenance operation in designated locations
- Use drip pans
- Properly dispose oils, grease, fluid, batteries, tires, containers, etc
- Properly collect waste fluids in labled containers

Pollution

Intro to

Stormwater



Best Management

Practices



4. Vehicle and Equipment Cleaning

- Regularly inspect vehicles for oil leakage
- Remove snow and ice at Wheatsworth facility only
- Vehicle Rinsing shall only be permitted following de-icing application.
 - Prior to rinsing, all loose materials shall be hand swept from equipment and returned to storage material storage facility.
- Rinsing is limited to cold water.
 - Soaps, detergents, degreasers are not permitted during post storm vehicle rinsing. No Rinsing of engine or other enclosed machinery is permitted.
 - Clear water underbody rinsing is permitted



Intro to Stormwater

Pollution

Basic Requirements Best Management Practices

5. Loading and Unloading of Materials

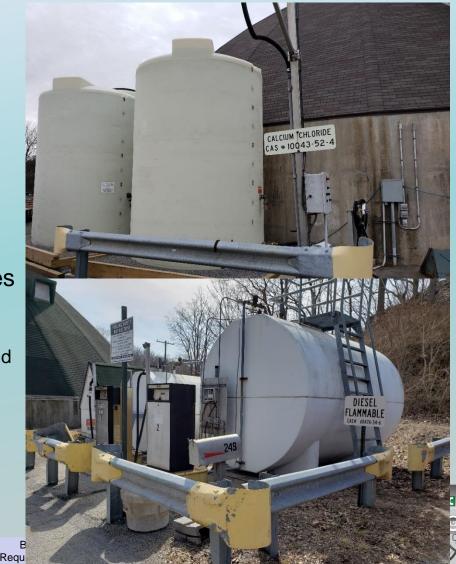
- Provide ample and accessible supply of spill kits
- Transfer Liquids indoors away from drains with adequate ventilation
- Dike drains
- Transfer flammable liquids with bonding and grounding techniques
 - Bond: equalize static electric charge between containers
 - Ground: drain excess charge to ground

Pollution

- Do not smoke
- Remove all ignition sources

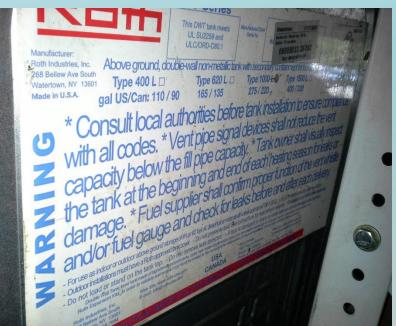
Intro to

Stormwater











6. De-icing Material Storage

- All Salt shall be stored in a permanent structure with an impermeable floor and completely roofed
- If temp outdoor storage required, use plastic sheeting or tarp
- Clean spills with dry cleaning method
- Regularly sweep loading area, especially after loading/unloading activities
- Minimize material transport distance
- Minimize tracking of materials







7. Storage of Liquids, Solid Waste and Hazardous Materials

- Cover waste oil storage tanks with roofs to prevent rain water contact
- All exterior waste storage tanks shall have secondary containment
- Keep tops and lids on waste storage containers closed
- Monitor storage tank levels and do not overfill tanks, report full tank to your supervisor
- Inspect storage tanks regularly for signs of leakage.
- Maintain records of inspections and findings
- Maintain ready availability of spill kits including sorbents, dikes, shovels



Intro to Stormwater

Pollution

Basic Requirements Best Management Practices

Best Management Practices 8. Spill Response



- Small: Generally, one (1) or less gallons onto impervious surfaces with no potential for storm water or soil contamination
 - Medium: 1-5 Gallons
 discharged into the
 environment with no potential
 for storm water or soil
 contamination

Large: Generally, in excess of one (5) gallons.

Questions

 Notify Sussex County Sherrif for Assistance 973-579-0888



Intro to Stormwater

Pollution

Basic Requirements Best Management Practices

Spill Response Continued

Classes of Materials

- Hazardous Chemicals: acids, solvents, Reference the Right-to-Know / Safety Data Sheets for safety related data, employ appropriate PPE
- Petroleum: Petroleum Products (oils, gas, diesel, etc.)
- Solid: deicing chemicals
- Other Liquids: coolants, cutting fluids, oil-based paints and stains

- Conduct cleanups of any spills immediately after discovery.
- Spills are to be cleaned using dry cleaning methods only. Spills shall be cleaned up with a dry, absorbent material (e.g., granular absorbent and absorbent pads) and the rest of the area is to be swept.
- These materials are readily available in the on-site spill kits.
- On a monthly basis inspect Spill Response kits for functionality.
- Maintain a written log at the facility.

Review and Discussion of Site Photos Wrap-up and Questions?



Intro to Stormwater

Pollution

Basic Requirements

Best Management Practices