

TOWN OF RIVERHEAD
STORM WATER MANAGEMENT PROGRAM
Municipal Separate Storm Sewer Systems (MS4s)
Permit No. GP-0-10-002

March 2009
Revision 1 December 2010
Revision 2 March 2011
Revision 3 March 2012
Town of Riverhead
Engineering Department
Storm Water Management Office

TOWN OF RIVERHEAD

PHASE II STORM WATER MANAGEMENT PROGRAM

NEW YORK STATE'S SPDES GENERAL PERMIT

FOR STORM WATER DISCHARGES

PERMIT NO. GP-0-10-002

FOR

MUNICIPAL SEPARATE STORM WATER SEWER SYSTEMS (MS4s)

MARCH 2009
Revision 1 December 2010
Revision 2 March 2011
Revision 3 March 2012

Prepared for

TOWN OF RIVERHEAD
OWNED AND OPERATED SEPARATE STORM WATER SEWER SYSTEM

Prepared by

TOWN OF RIVERHEAD
ENGINEERING DEPARTMENT AND STORM WATER MANAGEMENT OFFICE

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Appendix K Town of Riverhead, Flanders Bay Watershed, Watershed Improvement Strategy (includes Retrofit Plan)

1. INTRODUCTION

The Town of Riverhead has developed a storm water management program (TORSWMP) as required for coverage under the New York State Pollution Discharge Elimination System (SPDES) general permit No. GP-0-10-002, specific permit NYR-20A020.

The aim of this program is to control storm water runoff discharges from the Town facilities, and developed land within the Town to the waters of the United States in accordance with the requirements of federal Phase II storm water regulations under the Clean Water Act. The aim of the Clean Water Act, the federal Phase II storm water regulations and the program proposed in this document is to reduce to the "maximum extent practicable" pollutants in storm water discharges. The concern for controlling storm water discharges can be traced to the 1972 Clean Water Act's Section 208 provisions for evaluating the impacts of and recommending controls for point and nonpoint source discharges in conjunction with the development of hundreds of area-wide water quality management plans known as "208 plans". Some of the stormwater pollutants identified in these studies include suspended solids, sediments, bacteria, nutrients, pesticides, herbicides, toxics, floatables, oil, grease, heavy metals, synthetic organics, petroleum hydrocarbons and oxygen demanding substances. The adverse impact of these pollutants in storm water discharges include closed beaches, closed shellfish areas and toxic contamination causing fish consumption bans, beach and shoreline litter, and floatables, siltation of marina and shipping channels, habitat/wetland degradation, and stream bank erosion.

The TORSMWP includes a listing of Best Management Practices (BMP's) that will be implemented by the Town in order to achieve the regulatory standard of reducing pollutants in the Town's storm water to maximum extent practicable. Existing Town storm water programs and activities designed to protect the Town's water quality will be supplemented with new BMP activities. Initial measurable goals and an implementation schedule were developed for each of the BMP's in the TOR SWMP. The BMP's, measurable goals, implementation schedule and initial TORSWMP were developed by Dvirka and Bartilucci Consulting Engineers in March 2003, and recently updated to comply with the GP—0-08-002 by the Town's Engineering and Storm Water Management Office. The revisions were documented with input from Department Heads, and Town Council, during a series of meetings held in Months of 2008. The Task Groups consisted of a combination of municipal officials, watershed protection committee members, Peconic Estuary Program members, and **consulting engineers**. The BMP's, measurable goals and implementation schedule were selected based on their ability to meet specific permit requirements and to reduce pollutants in the County's storm water runoff to the maximum extent practicable. They were also selected based upon a general assessment of BMP effectiveness; applicability to Town of Riverhead, and cost associated with the implementation of the BMP's. Effectiveness of the selected BMP's, and success in achieving the selected measurable goals will be reviewed annually and modified, if necessary.

1.1. PROGRAM DEVELOPMENT

The Town of Riverhead has developed a storm water management program (TORSWMP) in accordance with the New York State Discharge Elimination System (SPDES) requirements for obtaining authorization for storm water discharges and certain non-storm water discharges. This TORSWMP has been developed in accordance with guidelines published by the New York State Department of Environmental Conservation (NYSDEC) for coverage under SPDES General Permit No. GP-0-08-002. The TORSWMP has been developed to facilitate the Town's efforts in

reducing storm water pollutants from the Town's municipal separate storm sewer system (MS4) to the maximum extent practicable as required by the SPDES General Permit.

The TORSWMP describes specific actions that will be taken over a five-year period to reduce pollutants and protect the Town's surface waters. The specific activities to be implemented are referred to as "Best Management Practices" (BMP's). Various BMP's have been developed for each of the six "Minimum Control Measures" (MCM's) required by the General Permit. The TORSWMP also sets measurable goals and provides a schedule for the implementation of the BMP's. Implementation of the selected BMP's is expected to result in reductions of pollutants discharged into the Town's streams, ponds, tidal estuaries, embayments and the Long Island Sound.

1.2. BEST MANAGEMENT PRACTICE SELECTION

The Town of Riverhead has historically implemented various storm water related BMP's intended to specifically protect the Town's storm water quality. An important aspect of developing an effective, compliant and cost effective SPDES Phase II SWMP is to take credit for these on-going programs. Details of the Town's storm water related programs have been collected, summarized and categorized into each of the six MCM's required by the General Permit. Some of these existing programs meet specific General Permit requirements, while others contribute toward fulfilling the General Permit mandate of reducing pollution to the Maximum Extent Practicable (MEP). Alternative BMP's will be evaluated on a yearly basis as the TORSWMP is reviewed and modified.

MINIMUM CONTROL MEASURES

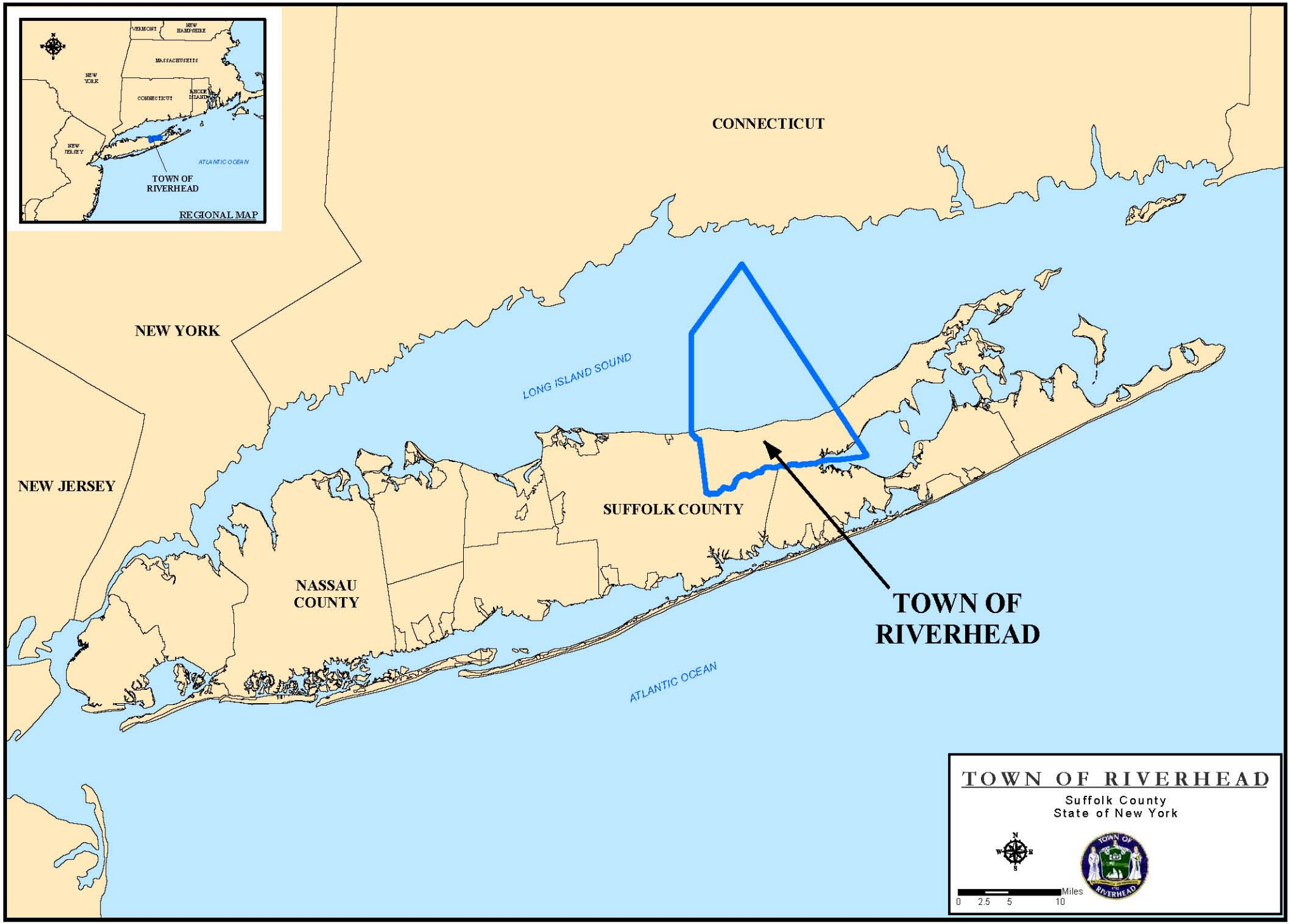
In accordance with SPDES General Permit requirements, the TORSWMP includes an implementation plan for BMP's in each of six Minimum Control Measures. The six minimum control measures are:

1. Public Participation and Outreach on Stormwater Impacts
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post Construction Runoff Control and,
6. Pollution Prevention and Good Housekeeping.

Specific requirements of each MCM are provided in the following sections.

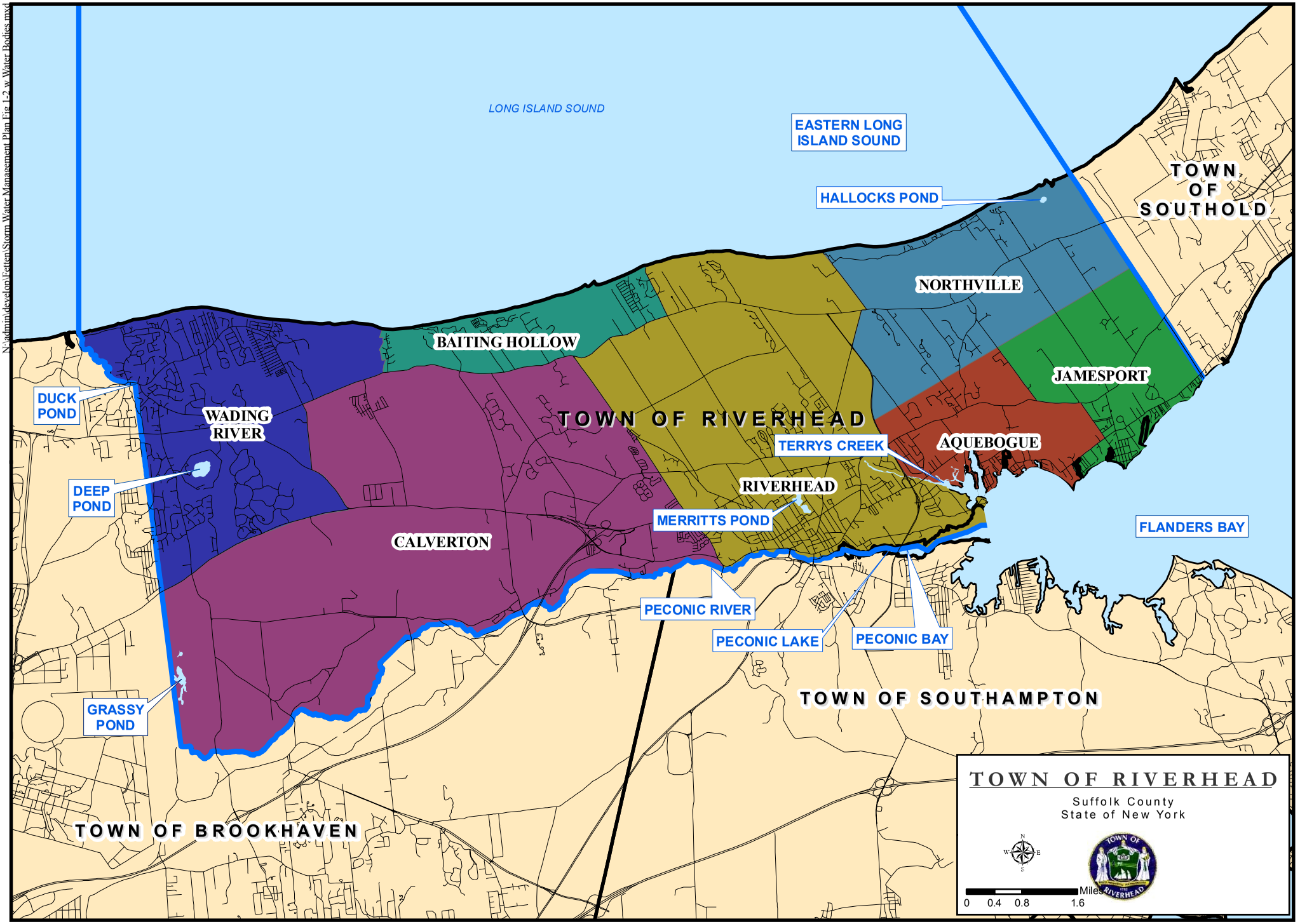
1.3. TOWN OF RIVERHEAD MUNICIPALITY BACKGROUND

The Town of Riverhead, located in the eastern end of Long Island in Suffolk County, encompasses an area 4.75 miles wide and extends approximately 15 miles from west to east, and covers approximately 78 square miles (49,920 acres). Located 70 miles from NYC, Riverhead lies between the Peconic River and the Great Peconic Bay on the south, and the Long Island Sound to the north as shown in Figures 1-1 and 1-2.



TOWN OF RIVERHEAD
STORM WATER MANAGEMENT PLAN

LONG ISLAND MAP
FIGURE 1-1



TOWN OF RIVERHEAD
STORM WATER MANAGEMENT PLAN

TOWN COMMUNITIES
FIGURE 1-2

According to the 2000 U.S. Census Bureau, the population of the Town is 39,183. A breakdown of the area (square Miles) and population of the communities in the Town is provided in Table 1-1

Table 1-1
Town of Riverhead Area and Population

Designated Places (Hamlets)	**Area (sq.mi.)**	**Population**	**% of Total Pop.**
Aquebogue	3.8	2,254	5.7
Baiting Hollow	3.2	1,493	3.8
Calverton, part	23.6	4,364	11.1
Jamesport	4.5	1,526	0.6
Riverhead	15.1	22,897	58.4
Wading River	9.8	7,156	18.3
Northville	7.4	801	2.0
	67.4	39,183	100.0%

The Town of Riverhead is governed by the Town Supervisor and four Town Council People. There are several different departments tasked with running the different public service offices of the Town included but not limited to:

- Accounting Department
- Assessor's Office
- Building Department
- Sanitation Department
- Sewer District
- Highway Department
- Justice Court
- Municipal Garage
- Planning Department
- Police Department
- Recreation Department / Intergenerational Program
- Senior Services Department
- Fire Marshal
- Community Development
- Tax Receiver's Office
- Town Attorney's Office
- Town Clerk's Office
- Town Engineering (SMO)
- Water District

1.3.1. COMMUNITY RESOURCES

For purpose of stormwater management and planning, key community resources within the planning area consist of parks, schools and libraries. These facilities are important elements in the public education, outreach and participation aspects of the storm water management plan.

1.3.1.1.PARKS

Parks and recreation resources in the Town include State, County and Town parks; State conservation areas; private camps and clubs; public golf courses; public school sites; and the Pine Barrens Core Preservation Area (see Fig. 1-3).



TOWN OF RIVERHEAD
STORM WATER MANAGEMENT PLAN

PINE BARRENS CORE PRESERVATION AREA
FIGURE 1-3

The major Town parks include the following

NAME	LOCATION	FEATURES
Stotzky Memorial Park	Pulaski St., Riverhead	12 acres, softball field, little league fields, tennis courts, playgrounds, f and day care center
Grangebel Park	Peconic Ave., Riverhead	3 acres, picnic area- situated on the Peconic Riverfront
Nadel Park	Nadel Drive, Riverhead	Neighborhood park with swings, backstop, to be revitalized with new play equipment
John Lombardi Memorial Park	Roanoke Ave., Riverhead	Gazebo and garden area –adjacent to the Suffolk County Community College Culinary Arts
South Jamesport Park	Town Beach Rd. & Peconic Bay Blvd., Jamesport	Two tennis courts, basketball court, picnic area, public beach with restrooms
Bayberry Park	Bayberry Rd., Wading River	7 acres, softball field, tennis and handball courts, basket ball court, bocci and shuffleboard courts, nature trails
Wading River Duck Ponds	North Country Road, Wading Riverhead	Two small ponds, and green space with benches
9/11 Memorial Park	Corner of Riley Avenue and Edwards Avenue, Riverhead	Memorial to 911 Victims
Oakland Drive Park	Oakland Drive, Riverhead	Playground Equipment and ½ basketball court, picnic tables
Millbrook Gables	Lewis Street	Playground Equipment, ½ basketball court, picnic tables
EPCAL Park	Rt. 25, Calverton	67 acres in development with three softball fields, one baseball fields, 4 multipurpose fields, tennis courts, handball courts, picnic areas.
Jamesport Community Center and Park	S. Jamesport Ave., Jamesport	Play equipment, baseball field, picnic area
Henry Pfeiffer Comm. Center and Park	River Road, Calverton	Play equipment, community center, picnic area
Meeting House Pocket Park	Meeting House Creek Rd., Aquebogue	Picnic area, garden
George Schmelzer Pocket Park	Rt. 25., Riverhead	Picnic area, garden
Grumman Airplane Memorial	Rt. 25, Calverton	Memorial park with two retired planes, a F-14A and a A-6E
Iron Pier Beach	Pier Ave., Jamesport	Play equipment, picnic area, public beach with restrooms
Miamogue Point Park	South Jamesport Av. And Front St., Jamesport	Park in progress to include boardwalk, picnic area, and future play area
Wading River Beach	Creek Road, Wading River	Play equipment, gazebo, picnic area, public beach and restrooms
Reeve's Beach	South end of Park Ave., Riverhead	Gazebo, timber boardwalks, beach access, public beach and restrooms
Horton Avenue Park	Horton Ave. & Middle Road., Riverhead	Play equipment, basket ball court, picnic area
Two Bears Park	Old Farm Road, Riverhead	Play equipment, tennis courts

Indian Island – Suffolk County Park	Rt. 105 between Rt. 24 & Rt. 25	Camp grounds and recreation area and nearby 18 hole golf course
Wildwood State Park	Wading River	2 miles of beach, camping, trailer hookups and 2 miles of biking trails.
Jamesport State Park	Sound Avenue, Jamesport	Park in progress
Carter Parcel	Sound Avenue	To be renovated as a bird watching center and a bicycle stop area

*Full descriptions and site inventories for these facilities are located in Appendix C.

1.3.1.2.LIBRARIES

- Riverhead Free Library
- Suffolk County Law Library

1.3.1.3.SCHOOLS

- Riverhead Central School District
- Riverhead Charter School
- Dowling College-Riverhead Center
- Suffolk County Community College Culinary Arts
- Living Waters
- Mercy High School
- St. David's School
- St. Isidores School
- B.O.C.E.S.

1.4. NATURAL RESOURCES

The east end of Long Island has many natural resources which make it optimum for farming, living, and recreating. These natural resources are a precious commodity and must be protected through preservation, conservation and smart land development planning.

1.4.1. TOPOGRAPHY AND SOILS

The topography of the Town ranges from flat along the coasts to rolling hills in the interior portions. Elevations range from sea level along the shores of the Long Island Sound, Peconic Bay and Flanders Bay, to over 200 feet on the hills near Roanoke Point off the north central coast of Town.

Based on the General Soils Map in the U.S. Department of Agriculture Soil Conservation Service Soil Survey of Suffolk County, NY, the predominant soil associations in the Town are as follows:

- Carver-Plymouth-Riverhead: Deep, rolling, excessively drained and well drained, coarse textured and moderately coarse textured soils on moraines. This association exists mostly along the shore of the Long Island Sound
- Haven-Riverhead: Deep, nearly level to gently sloping, well drained, medium textured and moderately coarse textured soils on outwash plains. This association exists mostly in the interior areas of the Town between the Long Island Sound and the Peconic River.
- Plymouth-Carver, rolling and hilly: Deep, excessively drained, coarse-textured soils on moraines. This association exists mostly along the Peconic River corridor

There are isolated areas within the Town of Riverhead that contain the Berryland Mucky Sand Dune Land, Beaches, and Escarpments.

1.4.2. WATER BODIES

Key surface water resources in the Town include the Long Island Sound and the Peconic Estuary. Other important water bodies include named and unnamed streams, creeks and small lakes/ponds. Surface water bodies in the Town are listed below and shown on Figure 1-2.

- Deep Pond
- Duck Pond
- Eastern Long Island Sound
- Flanders Bay
- Grassy Pond
- Hallocks Pond
- Meetinghouse Creek
- Merritts Pond
- Peconic Bay
- Peconic Lake
- Peconic River
- Terry's Creek

In 1978, the Long Island Regional Planning Board (LIRPB) published the Long Island Comprehensive Waste Treatment Management Plan (commonly known as the 208 Plan). The plan introduced the concept of hydrogeologic zones based on differences in underlying groundwater flow patterns and water quality. There are two types of zones. The first are land areas that contribute recharge to the deep aquifers; the second are land areas that contribute recharge to the shallow aquifers and are considered discharge zones. The plan identified eight hydrogeologic zones. Zones I, II and III are the major deep recharge zones. Zones IV through VIII are the shallow discharge zones.

Most of the area in the Town is in Zone III or IV. Some of the coastal area in the northwestern part of the Town (Wading River) is in Zone VIII. Zone III contains groundwater of excellent quality in the upper glacial, Magothy and Lloyd aquifers. Zone IV is characterized by shallow flow systems that discharge to streams and marine waters. There has been some contamination from agricultural activities in parts of Zone IV.

Special Groundwater Protection Areas (SGPAs) were identified in the Groundwater Management Program for Long Island, NYSDEC, 1983, and in the 208 Nonpoint Source Management Handbook, LIRPB, 1984. These areas are defined as significant, largely undeveloped or sparsely developed geographic areas of Long Island that provide recharge to portions of the deep flow aquifer system. The southwestern portion of the Town is partially within the Central Suffolk Pine Barrens SGPA. This area, like all other SGPAs, requires sound management in order to be maintained as a source of good quality recharge to the aquifer system. Figure 1-3 shows the hydrogeologic zones and the SGPA in the Town.

Figure 1-3

1.4.3. LAND USE

The Town of Riverhead has been developed with three main roadways, NYS 25, CR 58, and Sound Avenue. There is a distinguished urbanized downtown area along NYS 25 centralized between Raynor Avenue and Ostrander Avenue in the Town of Riverhead. Between Sound Avenue and NYS 25 and CR 58, there are many rural areas developed with agricultural lands. There is a large quantity of residential subdivisions north of Sound Avenue, south of NYS 25 and CR 58. See the Figure 1-4 for Land Use within the Town.

Figure 1-4

2. EXISTING MUNICIPAL STORM SEWER

During the developing years of Riverhead in the late 1800s through to the 1970s, Engineers believed one of the best resources that we had were water bodies to discharge stormwater, sanitary wastes, and other pollutants into. "The solution to pollution is dilution". Although there are no known sewage outfalls remaining, there are still many storm water outfalls that discharge to water bodies, such as streams, ponds, rivers and the Long Island Sound. The Town's highway infrastructure currently contains isolated drainage systems that discharge stormwater to recharge basins or infiltration basins (leaching pools), direct discharges to surface water bodies, and infiltration into adjacent areas. The onsite storage of stormwater was typically achieved by the installation of drywells, recharge basins, or drainage reserve areas. In many cases, these facilities also included overflow structures that directed storm water resulting from extreme rainfall events to either other recharge basins or to drainage facilities that ultimately discharged to the surface waters of the United States.

The current inventory of storm water facilities within the Town include:

- 11 stormwater outfalls along the North Shore
- 18 stormwater outfalls along the Peconic River
- 7 Suffolk County Recharge Basins
- 5 New York State Recharge Basins
- 127 Town Recharge Basins
- 52 Recharge Basins in residential subdivision that have not yet been transferred to the Town or are privately owned.

2.1. HIGHWAY DEPARTMENT

The Riverhead Highway Department is charged with maintaining municipal roads which include the un-improved Right-of Ways, the paved way, pedestrian amenities, and stormwater systems which include the MS4 system of swales, catch basins, leaching pools, recharge basins, and all interconnecting pipes.

2.2. BEST MANAGEMENT PLAN COMMITTEE

The Town has established the Stormwater Management Office (SMO) which is incorporated into the Engineering Department. The SMO works directly with the Highway Superintendent, Planning Department, Building Department and the Town Attorney's Office. The purpose of the SMO is to oversee the implementation of the Stormwater Management Program in reviewing SWPPP's for new developments, developing programs and policies regarding IDDE, Good Housekeeping, Public Education and Participation and Capital Improvement Projects to improve stormwater quality discharging to impaired water bodies, and all other surface water bodies.

The Best Management Practices (BMP) Plan Development for the Town of Riverhead specific to Stormwater is handled by a BMP Committee. A BMP committee is comprised of interested staff within the Town's organization. The committee represents the Town's interests in all phases of the Stormwater BMP plan development, implementation, oversight, and plan evaluation.

The BMP Committee has been developed to assist the Town in managing all aspects of the SWMP plan. The committee functions to conduct activities and shoulder the responsibilities of all elements discussed in the SWMP. The Town's BMP Committee's organization chart is shown in Exhibit 3.1-1

Exhibit 3.1-1 BMP Committee Chart

Insert Exhibit 3-1 SMO Organization

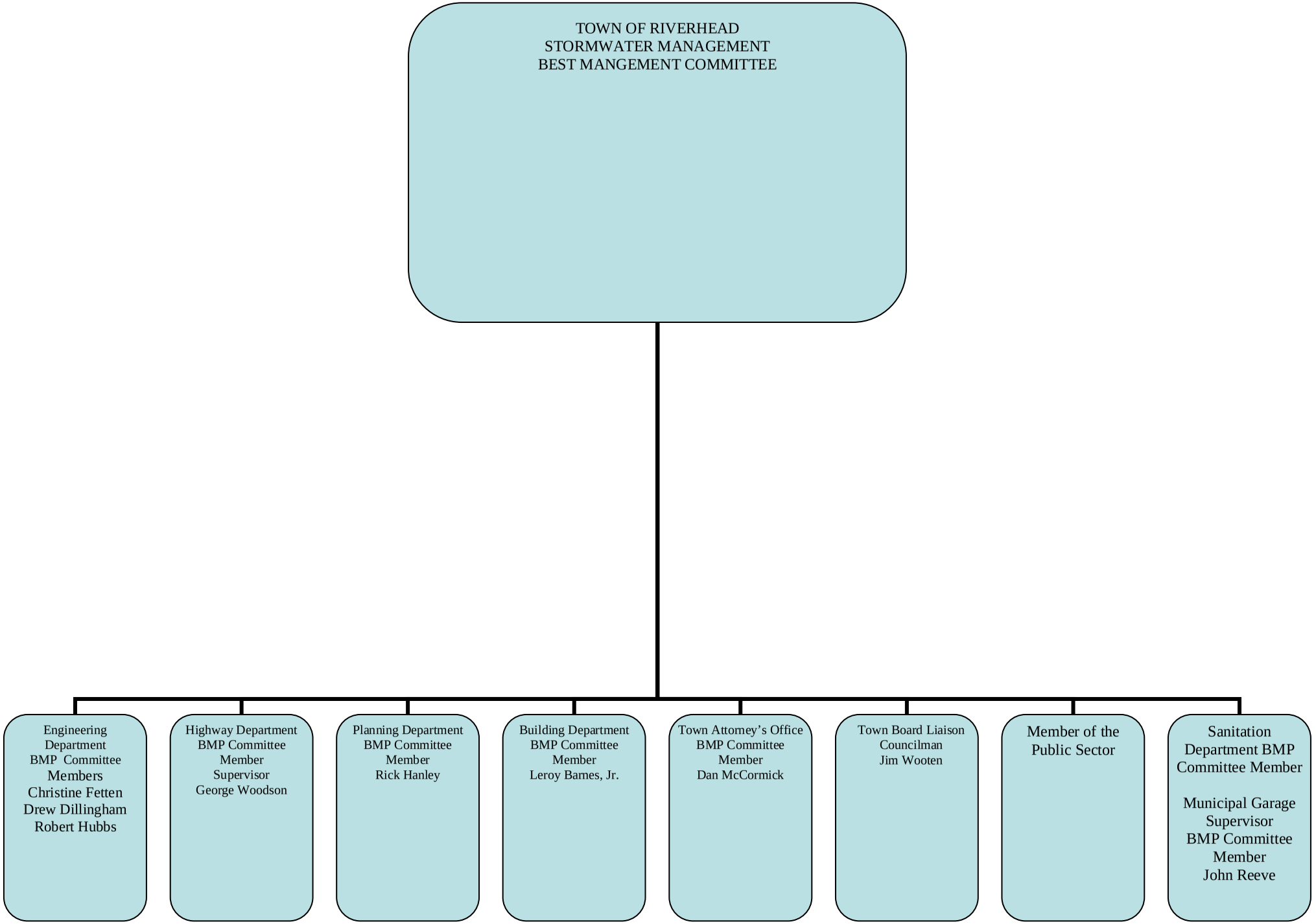


Exhibit 3.1-1 BMP Committee

To be most effective, the committee must perform tasks efficiently and smoothly. In large part, the personnel selected to act as committee members will determine the committee's success. Some of the considerations for personnel selection include the following:

- A lead committee member must be determined –
  - SMO charged with drafting policies based on documented BMPs for review by the BMP committee.
- Committee members must include persons knowledgeable of the areas involved with the Stormwater Processes.
  - Engineering Department / SMO office – Receives and reviews new SWPPP applications. Works with Capital Improvement Projects, oversees the Town's Buildings and Ground's Division. Works to implement Town's Good Housekeeping Training, Public Awareness Programs.
  - Hwy Dept.- develops new recharge basins, drainage installations, cleans and rehabilitates Town's MS4 system. First line of detection of Illicit Discharges.
  - Planning Dept.- receives new Site Plan applications for commercial developments, and subdivision applications.- Land disturbing activities.
  - Building Dept. – receives applications for building permits, demolition and excavation permits – land disturbing activities.
  - Town Attorney's Office-Drafts code amendments to enhance the Town's enforcement of the Federal Clean Water Act and the SPDES General Permit for Stormwater Discharges. Interprets legal issues with the SMO.
  - Town Board Representative- Provides constituent concerns to the committee members, acts as a liaison to the remaining board members and the Town Supervisor on Stormwater Issues.
- Committee members should have the authority to make decisions effecting BMP plan development and implementation and revision process.
- The size of the committee must be appropriate to the function
- The committee must represent affected areas of Town infrastructure.

2.3. POLLUTANTS OF CONCERN

In stormwater management, it is important to identify any waters in the planning area that are on the New York State Section 303(d) list of impaired waters. The Federal Clean Water Act requires states to periodically assess and report on the quality of water in their state. Section 303(d) of the Act also requires states to identify Impaired Waters, where specific designated uses are not fully supported. For these Impaired Waters, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategies to reduce the input of the specific pollutant(s) that restrict the water body, in order restore and protect such uses. Additionally, states are required to provide an assessment and listing methodology that explains their approach to water quality monitoring, data evaluation and listing. Impaired stream segments and primary pollutants of concern listed in Appendix 2 of the Permit within the Town of Riverhead include the following:

1. Flanders Bay, East/Center , and tribs pathogens
2. Flanders Bay, West/Lower Sawmill Crk nitrogen

3.	Flanders Bay, West/Lower Sawmill Crk	pathogens
4.	Meethinghouse/Terry's Crks and tribs	nitrogen
5.	Meethinghouse/Terry's Crks and tribs	pathogens
6.	Peconic River, Lower, and tidal tribs	nitrogens
7.	Peconic River, Lower, and tidal tribs	pathogens
8.	Reeves Bay and tidal tribs	pathogens

2.3.1. BACTERIA IN STORM WATER

Pathogens – Pathogens are viruses, bacteria, algae and protozoans that cause diseases in humans, animals and/or plants. Pathogenic or disease-causing bacteria are ubiquitous in nature and are normally associated with human and animal wastes. In many cases where human pollution is suspected on the basis of coliform test results, the actual pollution source may, in fact, be caused by animal wastes generated in the watershed's ponds, streams, streets, and yards. Storm water discharges throughout the watershed typically contain these bacteria. Based on numerous studies throughout the country over the last 15 to 20 years, it is not uncommon to find total coliform, fecal coliform and fecal streptococci in storm water runoff at very high concentrations, from hundreds of thousands to over a 100 million colonies per 100 ml (USEPA, 1992).

Bacteria levels in stormwater runoff routinely exceed public health standards for water contact recreation. Bacteria is a leading contaminant in many of New York's waters, and has led to shellfish bed closures in many areas of Long Island.

Pathogens may cause gastroenteritis, salmonellosis, and hepatitis A. Pathogens can enter the waterways through untreated or partially treated human sewage and wild/domestic animal waste. Two protozoa of major concern as waterborne pathogens are Giardia lamblia and Cryptosporidium parvum. Sources of pathogens in surface waters can be attributed to failing Sanitary Septic Systems, animal waste that is conveyed through the stormwater sewer systems. Livestock wastes, recreational boaters that dump untreated sewage is also a likely contributor of pathogens to Riverhead's waterbodies. High concentrations of pathogens can cause bathing beach closures, and shellfish closures.

The Town of Riverhead has two point source discharges that potentially convey concentrations of pathogens to the Peconic Estuary: Riverhead Sewer District outfall, and the Corwin Duck Farm on Meetinghouse Creek.

2.3.2. NUTRIENTS (NITROGEN)

Nitrogen (Nutrients) – Although essential for sustaining marine ecosystems, excessive nutrient levels will result in eutrophication, an increase in plant growth and decay, that can be harmful to an estuary. Nitrogen, is considered a nutrient, and when the balance concentration is exceeded, it stimulates aquatic plant growth including algae and "seaweed". Under certain conditions, these algal blooms are damaging to fish and other aquatic animals by consuming the dissolved oxygen (DO) in the water they need to breath. This condition, referred to as hypoxia can cause fish death. Excessive algae growth can cloud water, blocking sunlight from eelgrass which provides a nursery and spawning habitat for juvenile finfish and shellfish.

Nitrogen sources include agricultural and residential fertilizers, on-site disposal systems (sanitary systems). The Town of Riverhead has a large quantity of farm land, it also has a

sewage treatment outfall, as well as an active duck farm. In October 2007, New York State Department of Environmental Conservation implemented a Total Maximum Daily Load restriction for Nitrogen in the impaired waterbodies of the Peconic Estuary that include for the Town of Riverhead: Terry's Creek, Meetinghouse Creek, Sawmill Creek and Peconic River.

Runoff from both developed land, and farmed land has elevated concentrations of both phosphorus and nitrogen, which can enrich streams, lakes, reservoirs and estuaries. Enrichment of waterbodies by nitrogen and phosphorus is known as eutrophication. Sources of these pollutants include fertilizer, atmospheric deposition, animal waste, organic matter, and stream bank erosion. Another source of nitrogen is fossil fuel combustion from automobiles, power plants and industry.

Nutrients are particular concern in estuaries and are a source of degradation in many of New York's Water. Nitrogen has contributed to hypoxia in the Long Island Sound, and is a key pollutant of concern in the Peconic Estuary.

2.3.3. SEDIMENTS AND OTHER DEBRIS

Sediments and other debris such as litter and floatables carried by stormwater typically originate from construction sites, eroding road banks where there are no curbs, farm fields, lawns and yards that are sloped, eroded stream banks, damaged or eroded driveways, parking lots, walks and sidewalks, and roadway sanding for ice and snow. Typically pollutants bind to sediments that end up in the waterbodies causing water quality issues.

Because urban/rural runoff is really rainfall washing an urban/rural area, whatever materials or substances are on the impervious and pervious land, roof or parking surfaces, or which have been deposited into a street gutter or directly into a catch basin or drop inlet, will be carried to the storm sewer discharge. Examples of these items could include organic materials such as discarded food; crop cuttings, animal droppings; garbage from overfilled or toppled trash cans; the contents from discarded containers, bottles and cans; flyers and garage sale posters placed on utility poles; and eroded soils, leaves, branches and twigs.

Organic materials are trapped or retained in the catch basin sump, frequently causing standing water to develop in the bottom of the catch basin. These materials tend to discolor the standing water and decompose and, at times, produce odors. This is particularly noticeable when catch basin contents are disturbed or washed out during a storm, by dry-weather flows, or when the system is being cleaned. In some cases, the odors could be similar to sanitary waste odors, since the nature of the materials is similar.

Both suspended and deposited sediments can have adverse effects on aquatic life in streams, lakes and estuaries. Turbidity resulting from sediment can reduce light penetration for submerged aquatic vegetation critical to estuary health. Reflected energy from light reflecting off the suspended sediment can increase water temperatures (Kundell and Rasmussen, 1995). Sediment transports many other pollutants to the water resources be it surface waters and /or groundwater.

2.4. TYPICAL FLOWS TO STORM SEWERS

The majority of flow to storm sewers is stormwater runoff. Storm water runoff is surface flow water from precipitation that accumulates in and flows through natural and/or manmade storage

and conveyance systems during and immediately following a storm event. As storm water travels through a conveyance system, it carries pollutants to rivers, wetlands, coastal waters and groundwater, impairing water quality. The quality of runoff is affected by a variety of factors and depends on the season, local meteorology, geography and upon activities which lie in the path of runoff.

As development occurs, impervious surfaces, such as streets, parking lots and buildings, replace natural ground cover, preventing infiltration of rainfall. This results in an increase in surface runoff. The runoff carries whatever pollutants are in its path to our water bodies.

The quality of stormwater is important because stormwater conveys to rivers, creeks, streams, estuaries, and bays. Stormwater can also seep into the aquifers which are utilized as sole source for the potable water supply for Long Island. These resources are inherently valuable, but they also provide many communities with sources of economic viability.

2.4.1. WET WEATHER SOURCES

The most common, and often the largest, source of wet-weather flow is runoff generated by rainfall and snowfall. The majority of this runoff is from impervious surfaces and is directed to catch basins by drains or laterals that receive runoff from roofs, parking lots, basements, exterior stairways, roadside channels and ditches, retaining walls, parks lawns, patios, shopping and pedestrian plazas and sidewalks. The catch basins are connected to the storm sewer system for subsequent discharge to a retention or detention structure, or directly to a receiving water body, such as a stream, a pond or large receiving waters like the Long Island Sound, Peconic Bay, or the Peconic River.

2.4.2. DRY WEATHER SOURCES

Dry-weather flow occurs during dry weather in the form of delayed drainage that was started by the storm event. One common example of a dry-weather flow is basement drainage. This drainage occurs when sump pumps remove groundwater around building foundations. Frequently, the pumping of drainage of groundwater around a building or other structure may need to continue for a number of days or weeks after a rain event has stopped. Sometimes it is seasonal or continuous. In the Town of Riverhead, there are many small communities that are at a low elevation, and in close proximately to a water body that requires the use of sump pumps to avoid basement flooding.

A second common example of dry-weather flow is from drains in or below retaining walls, or bulkheads. These drains release water in saturated soils behind the wall in order to remove the pressure on the wall so that it does not topple. A third example of dry weather flow is groundwater seepage into structures below the groundwater level which are not perfectly tight. This could include storm sewers and manholes that are below the level of groundwater in the surrounding area.

Besides dry weather flow induced by previous precipitation, storm sewers receive a fourth type of dry weather flow. This includes non-stormwater discharges from:

- Water line flushing
- Diverted stream flows
- Rising groundwaters
- Groundwater infiltration
- Discharges from potable water sources

- Foundation drains
- Water from crawl space pumps
- Footing drains
- Lawn Watering
- Flows from riparian habitats and wetlands
- De-chlorinated swimming pool water discharges
- Street wash waters related to cleaning and maintenance.

Storm sewers could also receive dry-weather flow and other materials from illicit discharges. Some examples of illicit discharges to storm sewers are: radiator flushing on sidewalks, driveways or streets; improper motor oil disposal in street gutters or directly into catch basins; throwing litter and garbage in the gutter or a catch basin; roadway accidents that result in fuel spills or spills of truck contents; washing of ready-mix concrete trucks; overturned trash cans that spill their contents, including various household liquids, into the street; and disposal of household hazardous substances such as solvents, cleaning fluids, paints, empty or partially empty containers that still contain dangerous chemicals or liquids; and illicit connections to storm sewers from sanitary or industrial discharges.

2.5. CHARACTERISTICS OF STORM SEWER DISCHARGES

Storm sewer discharges in most urban areas have been found to contain a host of pollutants that are part of the precipitation itself (acid rain or snow), atmospheric deposition, or result from the rain or snow coming into contact with roofs, sidewalks, streets, parking lots and other areas. These pollutants and parameters can be part of runoff during wet-weather periods or dry –weather discharges after the precipitation event. In addition, some pollutants and parameters can also be found in the other dry-weather discharges described earlier and which are not related to precipitation.

Typical pollutants found in runoff in rural and urban areas originate on lawns, farm lands, golf courses, sidewalks, streets, parking lots, and park spaces and can include suspended solids, bacteria, nitrogen, pathogens, phosphorus, heavy metals, and a variety of organic compounds such as polychlorinated biphenyls, petroleum hydrocarbons and polyaromatic hydrocarbons. Based on historical and recent water quality assessment reports, NYSDEC has concluded that storm sewers cause impairments to many of the State's rivers, lakes, bays, and estuaries. Table 3.3.1-1 presents a list of pollutants of concern from various sources in urban areas. Table 3.3.1-2 presents a summary of possible sources and potential effects of runoff.

TABLE 3.3.1-1
SOURCES OF RURAL /URBAN RUNOFF POLLUTANTS

Source	Pollutant of Concern
Erosion	Sediment and attached soil nutrients, organic matter and other adsorbed pollutants
Atomospheric Deposition	Hydrocarbons emitted from automobiles, dust, aromatic hydrocarbons, metals and other chemicals released from industrial and commercial activities
Construction Materials	Metals from flashing and shingles, gutters and downspouts galvanized pipes and metal plating, paint and wood preservatives.
Manufactured Products	Heavy metals, halogenated aliphatics, phthalate esters, PAHs, other volatiles, phenols and oil from automobile use, zinc and cadmium from tire wear, and pesticides and phenols from other uses including industrial.
Landscape Maintenance	Fertilizer and pesticides. Generally as impervious area increases, nutrients build up on surfaces and runoff transport capacities also rise resulting in high loads.

	Exceptions include intensively landscaped areas (e.g., golf courses, cemeteries).
Plants and Animals	Plant debris, animal excrement
Farmland	Fertilizer and pesticides
Septic Tanks	Coliform bacteria, nitrogen/NO3
Non-Storm Water Connections	Inadvertent or deliberate discharges of sanitary sewage and industrial wastewater to storm drainage systems, including illicit connections, leaking sanitary collection systems, spills, industrial and commercial activities, construction activities, infiltration or contaminated groundwater and improper disposal
Accidental Spills	Pollutants of concern depend on the nature of the spill.

TABLE 3.3.1-2
SUMMARY OF POSSIBLE SOURCES AND
POTENTIAL EFFECTS OF RUNOFF POLLUTANTS

Category	Parameters	Possible Sources	Effects
Sediments	Organic and Inorganic Total Suspended Solids (TSS) Turbidity Dissolved Solids	Construction sites Urban/agricultural runoff CSOs Landfills, septic fields	Turbidity Habitat alteration Recreational and aesthetic loss Contaminant transport Navigation/hydrology Bank erosion
Nutrients	Nitrate Nitrite Ammonia Organic Nitrogen Phosphate Total Phosphorus	Urban/agricultural runoff Landfill, septic fields Atmospheric deposition Erosion	Surface waters Algal blooms Ammonia toxicity Groundwater Nitrate toxicity
Pathogens	Total Coliforms Fecal Coliforms Fecal Streptococci Viruses E. Coli Enterococcus	Urban/agricultural runoff Septic systems Illicit sanitary connections CSOs Boat discharges Domestic/wild animals	Ear/intestinal infections Shellfish bed closure Recreational / aesthetic loss
Organic Enrichment	Biochemical Oxygen Demand (BOD) Chemical Oxygen Demand (COD) Total Organic Carbon (TOC) Dissolved Oxygen	Urban/agricultural runoff CSO's Landfills, septic systems	Dissolved oxygen depletion Odors Fish Kills
Toxic Pollutants	Toxic Trace Metals Toxic Organics	Urban/agricultural runoff Pesticides/herbicides Underground storage tanks Hazardous waste sites Landfills Illegal oil disposal Industrial discharges	Bioaccumulation in food chain organisms and potential toxicity to humans and other organisms
Salts	Sodium Chloride	Urban runoff Snowmelt	Vehicular corrosion Contamination of drinking water Harmful to salt-intolerant plants

2.6. DIMINISHING GROUNDWATER RECHARGE AND QUALITY

Suffolk County lies over a sole source aquifer system that provides potable water to the residents and businesses located within the County. The aquifer system is comprised of three separate aquifers, the Glacial is the shallowest aquifer, the Magothy Aquifer underlies the Glacial Aquifer, followed by the Lloyd Aquifer. The Town of Riverhead has five functioning municipal wells within the Glacial aquifer, with relatively good water quality. The Town also has 8 municipal water wells within the Magothy Aquifer. In the more urbanized areas of Long Island, many of the municipal wells in western Suffolk and Nassau Counties that are within the Glacial Aquifer are no longer utilized due to high concentrations of pollutants.

The slow infiltration of rainfall throughout the soil is essential for replenishing groundwater. Both human health and aquatic systems are dependent on its steady discharge. Urbanization of an area results in the net decrease of pervious land, this coupled with the fact that increased population density increases potable well drawdown, natural recharge of stormwater is decreased or concentrated in certain areas. During prolonged periods of dry weather, stream flow sharply diminishes.

2.7. REDUCING IMPACTS OF STORMWATER

The Water Quality Volume (WQv), a measure of the volume of most polluted storm water, the first flush, that washes the road of all pollutants, is based on an equation (WQv= (P*Rv*A)/12). It is designed to improve the water quality sizing to capture and treat 90% of the average annual stormwater runoff volume. The WQv is directly related to the amount of impervious cover created at a site. The 90% rainfall event number is supplied in Fig. 4.1 of the New York State Stormwater Management Design Manual (NYSSMDM) (August 2003), for the Town of Riverhead it is 1.2.

In accordance with the NYSSMDM, practices that are acceptable for water quality treatment are listed below

1. Stormwater Ponds – Practices that have either a permanent pool of water or a combination of permanent pool and extended detention capable of treating the Water Quality Volume (WQv).
2. Stormwater Wetlands – Practices that include significant shallow marsh areas, and may also incorporate small permanent pools and extended detention storage to achieve the full WQv.
3. Infiltration Practices – Practices that capture and temporarily store the WQv before allowing it to infiltrate into the soil.
4. Filtering Practices – Practices that capture and temporarily store the WQv and pass it through a filter bed of sand, organic matter, soil, or other acceptable treatment media.
5. Open Channel Practices – Practices explicitly designed to capture and treat the full WQv within dry or wet cells formed by check dams or other means.

3. MINIMUM CONTROL MEASURE 1 – PUBLIC EDUCATION AND OUTREACH

The Town of Riverhead has impaired water bodies that are within the Peconic Estuary System. These water bodies include: Meetinghouse Creek, Sawmill Creek, Terry's Creek, and Peconic River. These surface waters are impaired by Nitrogen, and Pathogens. Generally land uses within a watershed can be prescriptive in determining pollutant loading. One BMP that the Town utilizes to improve water quality is to purchase land within impaired watersheds for preservation or passive recreation.

The Public Education and Outreach control measure is directed at educating the public, specific groups, i.e., construction trades, municipal officials, and homeowners to the impact stormwater runoff has on the environment. In addition, this education would involve teaching targeted groups steps that can be taken to reduce certain pollutants associated with runoff.

Important components of this plan include the continuation of forming partnerships with other government entities primarily through existing programs and resources; the utilization of educational materials to promote the program; and reaching diverse audiences such as target communities and children. Target communities include local academic/college groups, youth organizations, yacht clubs and marinas, conservation/environmental groups, and sportsman/fishing clubs.

3.1. DISTRIBUTED INFORMATION

The Town has been actively keeping informational stormwater brochures, septic system brochures and informational posters at all Town Facilities, and Atlantis Aquarium. The Town will continue this process in the next five years with modifications as the deadlines for various permit components arise. These pamphlets include the impaired water bodies, the pollutants of concern (POCs), sources of the POC's, and alternative methods of operations to reduce concentrations of POCs.

The Town SMO is working to further Minimum Control Measure 1 (MCM 1) by implementing pollution prevention and education programs to reduce nonpoint source pollutants generated from the following activities:

- Lawn and garden activities, including the improper application and disposal of lawn and garden care products, and the disposal of leaves and yard trimmings;
- Turf management on golf courses, parks, and recreational areas;
- Improper disposal of pet wastes;
- Boater sanitary disposal activities;
- Monitoring individual septic systems for integrity;
- The improper storage, use, and disposal of household chemicals, including automobile fluids, pesticides, paints, solvents, etc.;
- Commercial activities, including parking lots and gas stations;
- Activities that generate trash;
- Feeding of waterfowl;

Sediment and Erosion Control is a large component in reducing the pollutant loading to impaired water bodies. In this matter, the BMP Committee has been developing both code amendments, educational pamphlets geared to construction companies. There are pamphlets located at both the Building Department and the Planning Department. The Town's hope is to have influence on the conceptual design of sites, to encourage the implementation of stormwater BMPs including but not limited to the siting of specific uses on the site. In addition, in the next two years under the current SPDES General Permit, construction site operators must ensure they have received erosion and sediment control training before working in the Town of Riverhead. The SMO's office has been proactively faxing notices of classes for this education to contractors who work within the Town. The Town hopes to work with the local Peconic Estuary Program to participate in a training program for the east end townships.

The Town municipal operations, abide by the new legislation regarding the application of fertilizers to reduce potential overloading of nitrogen. The Buildings and Grounds Division is in the process of developing a turf grass management plan for all of the playing fields within the recreational

parks. The management plan will be geared towards pest management, and the use of organic materials for the enhancement of turf.

The Town offers free boater pump out services to recreational boaters in the Peconic Estuary. New boater pumpouts were recently upgraded at both the Peconic Riverfront and a 2009 upgrade to the East Creek Marina. In addition, there is a pumpout boat that will travel to locations within the Peconic Estuary to pumpout boats. Informational brochures for these services are provided at both the Town Hall and Recreation Department, the brochures include the radio frequency the boaters must utilize to contact the pumpout boat.

The Town of Riverhead offers yard waste pick up in the fall of each year to the residents of the Town. A Stop Throwing Out Pollutants Day (STOP Day) is offered to the residents twice a year. During this event, residents may bring household hazardous waste to the site. In addition, the Town will draft modifications to the Town Code pertaining to feeding wild waterfowl. This will serve to attempt to reduce the toxic affects of wild waterfowl sanitary wastes.

The Community Preservation Fund has been established within the Town to set aside monies to preserve properties as they become available. The Town has purchased many waterfront properties within the impaired waterbodies watershed boundaries. This program is ongoing, the priorities of this property is to purchase lands as they come available within impaired waterbody watersheds. Since 2009, the Town acquired approximately 2,049.79 acres of land for approximately $73,331,921.58, some of these acquisitions have been Suffolk County partnerships.

3.2. TOWN FACILITY INFORMATION

The goal of public education is to prevent or reduce nonpoint source pollutant loadings generated from a variety of activities within the Town with special emphasis given to the activities which contribute to Nitrogen and Pathogen loadings. The Town maintains educational pamphlets, and posters at each one of its facilities that residents visit. In addition to the pamphlets, posters, and other information currently available to Town residents, in the next 3 years, the Town will begin implementing a pro-active education within the school district and Atlantis Marine Aquarium.

3.3. TOWN OF RIVERHEAD WEBSITE

The Town of Riverhead maintains a website (www.riverheadli.com), with a link to Stormwater Management. The link brings residents to the educational pamphlets, posters, and links to the local and national program for non-point source pollution issues.

3.4. RAIN GARDEN PLANTING

Through the Town Recreational, Intergenerational and Buildings and Grounds divisions a rain garden will be constructed at the Town's Stotzky Park Facility. The Buildings and Grounds Division will excavate the rain garden and install the gravel subbase and the soil layer, while the Intergenerational volunteers (seniors and youths) will plant the rain garden and learn from the experience.

3.5. ATLANTIS AQUARIUM

The Town of Riverhead has informational pamphlets at the Atlantis Aquarium. The Aquarium is located in Downtown Riverhead, on the Peconic River and performs educational seminars. They are also involved with marine life rescue efforts. Beginning in 2009, the Stormwater Management Office will work with the Aquarium, to ascertain what pollutants cause physical damage to the

aquatic habitats, and work to incorporate education on pathogens, nutrients and the effect of stormwater quality on the ecosystem.

3.6. EVALUATING AND MEASURING PROGRESS

The Town of Riverhead will as a Standard of Practice (SOP) update the SWMP on an annual basis beginning in March (the end of the annual reporting period) and re-issue the program in June (when the annual report is due). These revisions/updates will reflect changes and appendix updates from the program plan that will address issues such as the effectiveness of BMP's, training, changes in regulations etc. The Engineering Department will schedule annual update reminders on the Microsoft Outlook Program to remind the SMO and other BMP committee members that the SWMP is under revision and what the proposed updates/revisions consist of and solicit updates/revisions from other committee members to enhance the program.

The Town will utilize Classification of Outcome Levels for the effectiveness assessment for each Minimum Control Measure. The Classification of Outcome Levels will be based on the document prepared by the California Stormwater Quality Association "Municipal Stormwater Program Effectiveness Assessment Guidance as well as the Municipal Operations Analysis score card. In 2010 the Town has re-assessed the evaluation and measurements of proposed outreach programs to better document the success of the program and we have incorporated additional measurement/evaluations as outlined below.

- Track the Number of Brochures Distributed at facilities; conduct public surveys and track on an annual basis the scores as an indicator of educations success.
- The Town will develop in 2011 a program whereby each resident receives a brief overview of the stormwater program through a public mailing. In 2012, the Town will begin a program to provide informational packets to new residents to the Town. In the information packet the Peconic Estuary will be discussed, other waterbodies, pollutants of concern, recycling efforts, and STOP programs. The number of packets sent on an annual basis will be tracked in a simple database.
- Track the number of presentations at public events – attempt to get annual presentations at the Civic Associations for Wading River; Jamesport and the Town Board; conduct surveys at the end of each presentation to evaluate success. Number of events and attendance at events shall be tracked. Re-assess in 2012 to determine if timeline is appropriate.
- Petition the NY State Department of Education (NYS DOE) to begin incorporating stormwater education into elementary school curriculums. Track success by continuing correspondence with NYS DOE.
- Begin tracking Town website on education information accessed pertaining to the stormwater program in relation to septic health and illicit discharge detection and elimination by use of counters.

3.7. ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- Who the targeted audiences where and what topics were included
- What strategies the Town used to achieve the education and outreach goals
- Web Pages that the information is posted on
- How the Town evaluates and measures the progress

The Town of Riverhead has adopted a policy beginning in 2010 to track proposed changes/improvements to the SWMP on an annual basis that will improve the effectiveness or address issues in not improving water quality and incorporate these proposed changes to the SWMP. The time that the SWMP will be addressed will be between the end of the reporting year and the deadline for submission of the annual report. During this time period, information utilized to prepare the annual report will be reviewed and where needed will be incorporated as revisions in the SWMP which will be presented during the Public Annual Report presentation prior to submission to the NYSDEC.

4. MINIMUM CONTROL MEASURE 2 – PUBLIC INVOLVEMENT/PARTICIPATION

4.1. LOCAL STORMWATER PUBLIC CONTACT

The public are encouraged to contact the SMO to report illicit discharges, with questions, etc. The Town has an active website page devoted to informing the public on initiatives the Town is taking to improve water quality of the Peconic Estuary system, and other water bodies in the Town. This website provides all contact information necessary to contact the SMO. In addition, the SMO contact information is shown on all informational brochures and posters.

4.2. COMMUNITY PRESERVATION

The Town has two efforts to preserve property, through the purchase of open space (fee title) and the development rights on agricultural lands (only right to development is purchased and the owner/farmer retains title to the property with the condition (restrictions or conservation easement) that the property remains in agricultural production). The residents' participation in the Town's efforts to preserve property with community preservation funds is voluntary. The Town created two committees, the Open Space Committee (Chapter 14) and Farmland Preservation Committee (Chapter 44), which meets once a month to review applications to preserve open space and farmland. For several years, the Town utilized the services of Peconic Land Trust to promote and educate land owners and farmers of the opportunity to participate in the program. Over the years, members of the community/owners of lands located within the Town have learned about the opportunity to participate in the program through the open space and farmland committee members, word of mouth from individuals that participated in the programs, referendums, resolutions and public hearings such that individuals appear at open space and farmland meetings requesting that their property be considered for preservation or send letters, e-mails and inquire via telephone. The Open Space and Farmland Committees review the parcels, conduct site visits, rank or rate the parcels and vote to recommend to the Town Board. Thereafter, the Town via resolution votes to hold a public hearing so the public may participate or express opinion regarding the preservation of a particular parcel. If approved, the Town Board will adopt a resolution approving the purchase and authorize the Supervisor to execute a contract to purchase said parcel. The Open Space Committee ranks parcels based upon natural features and significant environmental concerns, including but not limited to parcels to aid in stormwater treatment and surface water quality issues.

4.3. LITTER PICK UP EVENTS

The Litter Committee sponsors an annual event which organizes a litter clean up day. The Litter Clean up day is a two to three hour event in which participants come to the Town Hall to pick up bags, gloves, and vests, and are directed to a location or have chosen a location which can be improved by litter removal. The event is advertised through local papers, radio stations and on Channel 22 local television.

4.4. STOP DAY

The Town has a household hazardous waste drop-off program that involves a number of collections each year. There are also remote battery drops Although household chemicals make up only a small percentage of the residential waste stream, in order to protect the environment, it is important that they be disposed of properly. The Town's program accepts chemicals that include, but are not limited to, pesticides, aerosol cans, household cleaners, waste motor oil, batteries, electronics and fluorescent bulbs. With respect to used motor oil, New York State law requires every gasoline station that sells more than 500 gallons of motor oil to accept used motor oil at no charge.

4.5. RAIN GARDENS

Through the Town Recreational, Intergenerational and Buildings and Grounds divisions a rain garden will be constructed at the Town's Stotzky Park Facility. The Buildings and Grounds Division will excavate the rain garden and install the gravel subbase and the soil layer, while the Intergenerational volunteers (seniors and youths) will plant the rain garden and learn from the experience. The Town will continue to recommend and direct residents on what a rain garden is and how to construct them.

4.6. RIVERHEAD SCHOOL DISTRICT AND ATLANTIS AQUARIUM

The Town's Stormwater Management Office will be working integrally with the Riverhead School District and the Atlantis Marine Aquarium in the next 3 years to provide education regarding Stormwater Runoff and Illicit Discharges to both the Earth Science Classes and the Marine Rehabilitation classes. The Town will work with Atlantis to determine what stormwater pollutants that are causing the greatest impacts to both water quality and marine habitat degradation, and working towards the goal of education and removing these pollutants from our waterways. A measurable goal on the effectiveness of the education program would be a small quiz provided to both Earth Science Students, and a questionnaire for the aquarium visitors.

4.7. CONSERVATION AND RECYCLING

The Town realizes that part of the stormwater management program deals with good housekeeping, conservation, recycling, and efficiency. The Town has re-vamped its purchasing policies to reduce paper quantities within the process. In addition, we are utilizing more efficient indoor and outdoor lighting products, that utilize less energy and have a longer estimated life span. The Town will be participating in an outdoor lighting work shop in March 2009, to help educate local residents on the recent outdoor lighting codes that have been enacted. In addition, in 2009, the Town will develop a stronger water conservation goals, with encouragement to reduce land clearing, encourage use of native drought tolerant plant species, and in-house water conservation initiatives such as night time laundry and irrigation. Residents are encouraged to implement their own water conservation measures such as retrofitting plumbing fixtures with flow restrictors, modifying automatic lawn sprinklers to include rain sensors, repairing leaks in the home, installing water conservation fixtures/appliances and maintaining a daily awareness of water conservation in their personal habits.

In the summer of 2008, during a mid summer heat wave, the Riverhead Water District declared a voluntary water conservation initiative to reduce irrigation and non-necessary water usage. A measurable goal for this plan would be to determine if water usage has decreased in 2009, after the public has been provided with the information on water conservation. In addition, the Town pays for the electric usage of all street lights on Town properties, at the end of 2009, we will determine if there has been a savings in electricity, and if there has been a savings in replacement parts for street lighting.

4.8. EVALUATING AND MEASURING PROGRESS

The Town will keep an inventory of all public involvement programs, attendance will be taken. The Town hopes that as the information gets out there, more residents will participate in the hosted programs. In addition, we will maintain counts on all public meetings that distribute information regarding Stormwater Awareness.

During a 2010 EPA audit and review of the Town's program, it was determined that the Town's methods of evaluating and measuring progress was deficient. The Town as a standard operating procedure will adopt a policy of revising the SWMP on an annual basis to review the program and its effectiveness and change the program as needed to address deficiencies. As part of these revisions, the Town will incorporate new measurements and evaluations to track progress. As part of this Minimum Control Measure the town will begin the following actions to evaluation progress:

- Active storm drain stenciling program where the evaluation will include documentation of the activities including attendance and locations.
- Incorporation of stormwater information into the Stop Throwing Out Pollutant (STOP) days and tracking attendance and providing attendees with surveys to determine where education efforts may be improved.
- Tree planting events where the evaluation will be the number of events and the attendance at each, long term evaluation will be an annual increase of attendance /event.
- Native Plant Seed Distribution Activities – Incorporate the community garden club, Cornell Cooperative Extension to develop an annual program of harvesting seeds from Town parks and providing them to the public along with educational information on the benefits of utilizing native plants to reduce irrigation needs and reduce the need for fertilization. Develop public survey to determine if there is a public use decrease in fertilizer and pesticide use.
- Begin incorporating Solid Waste Management education in regards to recycling efforts as part of the Stormwater public involvement. Begin recycling program for plastic bottles and cans within the Town parks and track annual tonnage and long term effectiveness by the increase in recycling tonnage. The Town will look to do this park recycling plan beginning in the Spring of 2011
- Develop a voluntary school based poster contest for stormwater concepts. The BMP committee will review these posters and present the winner with a Town Proclamation and all posters will be displayed in the Town Hall Board Room. The evaluation will be the number of kids submitting posters. In 2011 the Town will approach one grade level, and the annual goal will be to incorporate additional grade levels on an annual basis.

4.9. ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- What opportunities were provided for public participation in implementation, development, evaluation and improvement of the Stormwater Management Program Plan
- What the public notice of availability of annual report and Stormwater Management Program Plan consisted of.

- Where are public access copies of the annual report, Stormwater Management Program Plan, and comments are kept
- What comments were received during the reporting period
- Was the annual report described at a Public meeting

5. MINIMUM CONTROL MEASURE 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

5.1. INTRODUCTION

Storm sewer systems are designed to convey stormwater and exclude water from non-stormwater sources with some exceptions. Illicit Discharges are defined as discharges not entirely composed of stormwater into the small MS4, except those identified in Part I.A.2 of the SPDES General Permit. Examples of illicit discharges are non-permitted sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit discharge could be any other non-permitted discharge which the permittee or the Town has determined to be a substantial contributor of pollutants to the small MS4.

By May 2011, the Town shall develop, implement and enforce a program to ensure that onsite wastewater treatment (septic systems) within pathogen impaired watersheds are inspected and where necessary maintained, or rehabilitated at a minimum frequency of once every three years. This will affect all property owners with private sanitary systems within the Meetinghouse, Peconic Estuary and Terry's Creek Watersheds.

5.2. PROGRAM

The BMP Committee and the SMO has been working continuously with GIS to perform the mapping of the different components to enhance the Illicit Discharge Detection and Elimination (IDDE) program. The BMP Committee has developed code amendments to prohibit illicit detections and enact fines to violators of such. The SMO has been working with several Town departments and Emergency responders who may witness potential illicit discharges. The Town has provided public education in regards to IDDE practices, and reporting.

Goal: Develop and implement a program to detect and address non-stormwater discharges including illegal dumping in the Town of Riverhead (ToR) Municipal Separate Storm Sewer System (MS4) in accordance with current assistance and guidance documents from the state and EPA.

Reference Documents

1. NYS DEC MS4 Permit GP-0-10-002
2. Center for Watershed Protection (CWP) Illicit Discharge and Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments by CWP & Robert Pitt, October 2004

5.2.1 TERMINOLOGY AND KEY CONCEPTS

a. Illicit Discharge –

i. Illicit Discharges – storm drain that has a measurable flow during dry weather containing pollutants and/or pathogens. A storm drain with measurable flow but containing no pollutants is simply considered a discharge.

ii. Illicit discharges have a unique frequency, composition and mode of entry into the storm drain system (MS4).

b. Storm Drain – Can be either an enclosed pipe or an open channel designed to convey stormwater downstream into either bodies of water, stormwater treatment units, and/or recharge basins.

c. Discharge Frequency – the frequency of dry weather discharges in storm drains may be one of three conditions.

i. Continuous – Discharges occur most or all of the time, are usually easier to detect and typically produce the greatest pollutants.

ii. Intermittent - Discharges occur over a shorter period of time (e.g., few hours per day or a few days per year). These are hard to detect but can still represent a water quality problem.

iii. Transitory – discharges occur rarely, usually in response to a singular event such as an industrial spill, ruptured tank, sewer break, transport accident or illegal dumping episode. These can be the most toxic to the downstream environment. These can be observed by pavement/pipe staining, loss in pressure or in-operation of the upstream structure, or through spill reports.

d. Flow Types

i. Sewage and Septage – produced from sewer pipes and septic systems.

ii. Washwater flows – wide variety – examples to be considered as illicit discharges include : Discharges of residential gray water, commercial carwash wastewater, floor washing to shop drains. These are detrimental to the environment as they contain significant amounts of detergents.

iii. Liquid wastes – wide variety – such as oil, paint, process water (radiator flushing water, plating bath wastewater, etc) that enter the storm drain system.

iv. Tap Water – pipe leaks of potable water – not considered a source of illicit discharge however can contribute to dry weather flows.

v. Landscape Irrigation – flows that occur when excess potable water used in residential and commercial – as long as water not mixed with chemicals (fertilizers or pesticides) not considered a source of illicit discharge but can contribute to dry weather flows.

vi. Groundwater & Spring Water – occur when the local water table rises above the bottom elevation of the inverts and enters into the storm drain either through cracks and joints, not considered a source of illicit discharge but can contribute to dry weather flows and also is an indicator that potential repairs are required to the system.

e. Modes of Entry

i. Direct – the discharge is directly connected to the storm drain pipe through a sewage pipe, shop drain or other kind of pipe.

1. Sewage Cross Connections – a sewer pipe that is improperly connected to the storm drain system that produces a continuous discharge of raw sewage to the pipe.

2. Straight Pipe – refers to relatively small diameter pipes that intentionally bypass the sanitary connection or septic drain fields, producing a direct discharge into open channels or streams.
3. Industrial and Commercial Cross Connections – these occur when a drain pipe is improperly connected to the storm drain system producing a discharge of wash water, process water or other inappropriate flows into the storm drain pipe.

ii. Indirect

1. Groundwater Seepage
2. Spills
3. Dumping a Liquid into a Storm Drain Inlet
4. Outdoor Washing Activities
5. Non-Target Irrigation from Landscaping

5.2.2 MAPPING

By January of 2009-2010, the ToR had identified and mapped all known outfalls. Discharge locations included surface waters, recharge basins and stormwater leaching pools. The outfalls were identified by GIS review of aerial geography, through review of as-built subdevelopment site plans, by general windshield surveys, and by communication with the Building, Highway and Building and Grounds Departments for outfalls identified during normal field operations.

Subsequently field work was conducted during the winter of 2009-2010 to confirm locations of outfalls to surface waters per the NYSDEC definition of an MS4. Outfall locations were adjusted and omitted and/or added to the GIS database according to field findings.

5.2.3 OUTFALL INVENTORY

During the summer of 2010, outfall inventory reconnaissance was conducted to confirm locations of surface water, recharge basin and leaching pool outfalls identified during outfall mapping. Outfall Reconnaissance Inventory/Sample Collection Field Sheets were used to collect field data for the inventory. Information collected included background data, outfall description, field data and physical indicators for any flowing outfalls, physical indicators for non-flowing outfalls and overall characterization. Many additional outfalls were found during the field reconnaissance and also through the discovery of additional existing construction plans. New outfalls will be mapped as they are constructed. Sample collection will be conducted of dry weather flows identified during this inventory after all collected data has been mapped and input to the data base.

Outfall reconnaissance inventoried within the Nitrogen and Pathogen impaired watersheds will be conducted at least once every five years, with reasonable progress each year.
In addition, approximately 20% of the Town's entire conveyance system will be mapped each year beginning in 2008 and ending in 2013. To date, approximately 75% of the mapping has been completed for the 40 miles of storm sewer system within the ToR. At a minimum, the map and supporting documentation for the conveyance system will include:

- Type of conveyance system - closed pipe or open drainage;
- Pipe material, shape, and size for closed pipe systems;
- Channel/ditch lining material, shape, and dimensions for open drainage systems;
- Location and dimensions of any culvert crossings;
- Drop inlet, catch basin, and manhole locations; and
- Number and size of connections (inlets/outlets) to catch basins and manholes and direction of flow.

Preliminary sewersheds were delineated by the Town during the winter of 2010. This delineation included all outfalls discharging to surface waters within Town boundaries. The delineation was performed initially from GIS topography and confirmed by field investigations of the sewersheds. These boundaries will be reconfigured based on the additional outfalls found during recent field reconnaissance and storm sewer construction plans review. Many outfall locations will also be adjusted based on the field work and plan examination. As during the initial delineation, GIS sewersheds will be confirmed in the field.

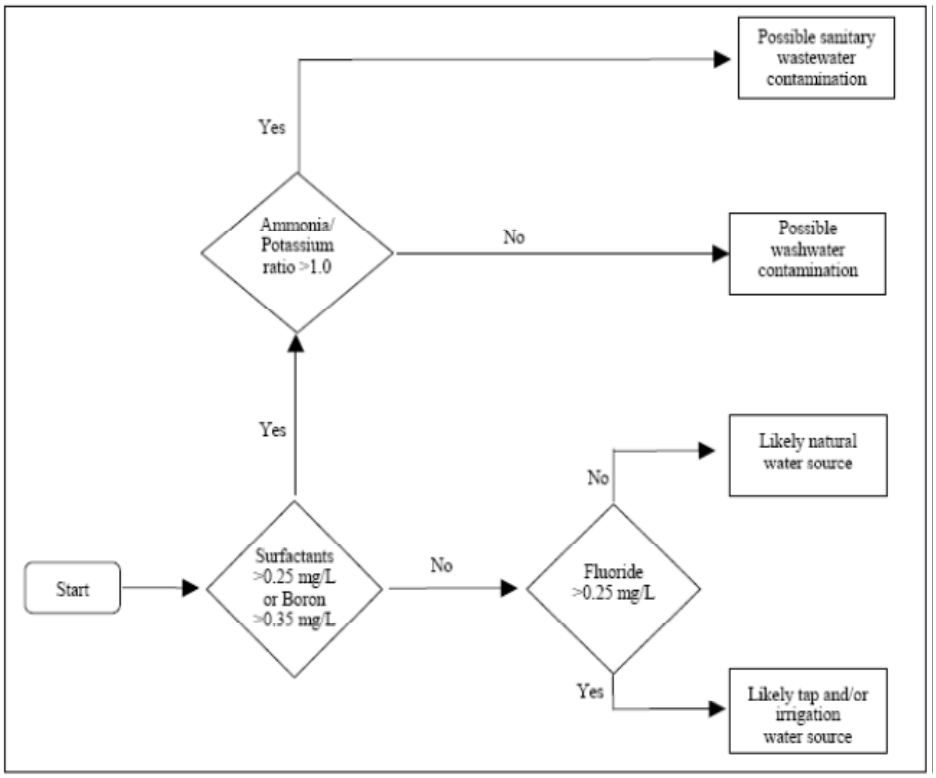
5.2.4 DRY WEATHER FLOW MONITORING

Outfalls having dry weather flow during the initial outfall inventory will be revisited after at least 48 hours of no rain, on three separate occasions and at least two weeks apart. If dry weather flow is present on any of the three occasions, the outfall will be revisited to collect water quality data.

- Temperature and salinity will be measured using the YSI 30 by collecting the discharge in a sample bottle and inserting the probe to obtain a reading. The sample may be discarded after the reading is taken. The sample bottle may be reused for measuring temperature and salinity at other outfall pipes; however, it will be rinsed out with deionized water between uses.

- Autoclaved sample bottles will be used to collect samples for analysis of surfactants, potassium, ammonia, and chlorine.

The chart below and water quality results will be used to determine if an illicit discharge/connection is present.



In addition to testing for the above parameters, samples for fecal coliform will be collected analysis. To collect a sample for fecal coliform analysis, the Town will use an autoclaved sample bottle. The sample is placed in ice, in a cooler. If high fecal coliform counts are found, the sample is preserved for possible DNA analysis (a tool that is used to identify the source of the pathogens).

5.2.5 PROCEDURES FOR IDENTIFYING PRIORITY AREAS OF CONCERN (GEOGRAPHIC, AUDIENCES, OR OTHERWISE) FOR THE IDDE PROGRAM

The ToR has several different land uses within its municipal boundaries. The more urban areas have been developed along State and County Roadways (SR 25 and CR 58). These areas have been designed with positive drainage systems, albeit inter-connecting catch basins conveying stormwater to an outfall. Other more rural areas of Town have been developed with isolated leaching structures.

Older residential neighborhoods were often designed with easement areas located at the low points in roadways and no true conveyance system constructed. This was to save on development costs. Riverhead Town Codes require residential neighborhoods be designed with a positive drainage system discharging to a recharge basin sized to account for either a 5” rain event (if safe overflow is provided), or a 8” rain event (if no safe overflow is provided).

The current Riverhead Town Codes for commercial development require developers to maintain all roof runoff on site, and to design stormwater facilities to contain a minimum of 2” of rain fall on site. In 2011, the ToR will incorporate the new stormwater design manual into the site plan requirements for the ToR.

The Town of Riverhead has identified two different priorities: impaired surface water bodies, land use types and older residential subdivisions to target for its IDDE program

5.2.6 IMPAIRED SURFACE WATER BODIES

The Town of Riverhead has identified its impaired surface water bodies as a primary target of concern for its IDDE Program. The Meetinghouse Creek Watershed is comprised of two different MS4 regulatory agencies, the NYSDOT and ToR. The Peconic River Watershed is comprised of three different MS4 regulatory agencies, NYSDOT, SCDPW, and ToR. Terry's Creek Watershed is comprised of three different MS4 Regulatory agencies, NYSDOT, SCDPW and the ToR. The Long Island Sound watershed is shared by SCDPW and ToR.

The ToR has identified its impaired surface water bodies as its primary areas of concern.

Meetinghouse Creek Watershe
Peconic River Watershed
Peconic Bay Watershed
Terry's Creek Watershed
Long Island Sound Watershed

5.3 LAND USES OF CONCERN

Since the ToR has nitrogen and pathogen watershed improvement strategies, land uses that contribute to nitrogen and pathogen pollutants have been identified. We have identified the following land uses within the ToR, sorted by their proximity to either a MS4 structure or a surface water body and will be mapping them through the GIS system for inspection tracking purposes. These land uses of concern are presented by location in Appendix C.

- 5.3.1 ANIMAL CARE/KENNEL FACILITIES
- 5.3.2 AUTO REPAIR AND FUEL FILLING STATIONS
- 5.3.3 BULK FUEL STORAGE
- 5.3.4 GOLF COURSES
- 5.3.5 FERTILIZER AND PESTICIDE DISTRIBUTORS
- 5.3.6 FARM LANDS
- 5.3.7 FUNERAL AND CREMATORIUM LOCATIONS
- 5.3.8 OLDER RESIDENTIAL DEVELOPMENTS WITHIN IMPAIRED WATERSHED AREAS

5.4 AVAILABLE EQUIPMENT

5.4.1 CAMERA - The Town of Riverhead Sewer District (RSD) currently has a camera that is used in viewing blockages within its Sanitary Sewer Lines. This camera has been shared with other departments (HwY and B&G) in the past as will remain the current practice to determine breaks, connections, contents of underground drainage systems, including but not limited to pipes, catch basins, leaching pools, etc.

5.4.1 SMOKE TESTING - The RSD currently utilizes smoke testing as a method to determine stormwater connections into the sanitary sewer lines. As the ToR does not have a combined system, non sanitary waste lines entering into the sanitary sewer lines can

inundate the Waste Water Treatment Plant (WWTP) and cause it to exceed its capacity. The Engineering Department has utilized this equipment in the past to ascertain pipe orientations and possible illicit connections.

5.4.2 DYE TESTING - The RSD and the Engineering Department utilize dye testing as a means for tracing water flow through pipe conveyance systems. This is a useful tool in determining illicit discharge paths.

5.4.3 VACUUM TRUCKS - The Town of Riverhead Highway Department currently has three vacuum trucks that it utilizes in the cleaning of drainage structures including but not limited to catch basins, leaching pools and storm drain pipes.

5.5 STAFF

5.5.1 KEN TESTA, P.E., TOWN ENGINEER – Mr. Testa oversees the Engineering Department and Stormwater Management Office on its day to day functions. Mr. Testa reports directly to the Town of Riverhead Town Board, who ultimately make decisions concerning the operations of the Town.

5.5.2 CHRISTINE FETTEN, P.E., ASSISTANT TOWN ENGINEER – Ms. Fetten participates in the day to day functions of the Engineering Department. Ms. Fetten along with Drew Dillingham compile annual information pertaining to the MS4 Annual Reporting requirements. Ms. Fetten, Mr. Dillingham, and Mr. McCormick consult on a regular basis in regards to the MS4 requirements, tracking, legal authorities, etc. for all MCMs, and Watershed Improvement Strategies. Ms. Fetten regularly attends Peconic Estuary MS4 meetings to participate in watershed MS4 opportunities.

5.5.3 DREW DILLINGHAM, P.E., C.P.E.S.C., C.P.S.W.Q., SENIOR CIVIL ENGINEER – Mr. Dillingham has been actively overseeing the operations of the MS4 requirements. He works very closely with Mr. Hubbs and Ms. Fetten in developing sub-watershed mapping, outfall reconnaissance and infrastructure mapping. Mr. Dillingham reviewed the Meetinghouse Creek watershed management plan developed by Horsely and Whitten , sponsored by the Peconic Estuary Program (PEP) and developed a workable plan for implementation that did not require private property acquisition and/or easements over private property. Mr. Dillingham regularly attends Peconic Estuary MS4 Meetings to participate in watershed MS4 opportunities.

5.5.4 ROBERT HUBBS, GIS SUPERVISOR – Mr. Hubbs has worked diligently on developing the ToR's GIS Mapping system. All employees with desktop access can access the ToR's GIS system. Mr. Hubbs has made himself available for training opportunities to town staff. Mr. Hubbs has been working on a naming convention so that all MS4 structures may be identified in the field by HWY staff during cleaning operations so they may be better tracked. In the near future the ToR will begin tracking the IDDE program and cleaning program on the GIS system.

5.5.5 DANIEL MCCORMICK, ASSISTANT TOWN ATTORNEY – Mr. McCormick is the legal counsel for the ToR's MS4 Program. Mr. McCormick works closely with the Engineering Department and Town Board to adopt Town Code adoptions for Construction Site Stormwater Controls, Illicit Discharge Detection and Elimination, Goose Feeding Prohibition and other Watershed Improvement Strategy Code adoptions. Mr. McCormick receives stormwater questions from the Engineering Department and issues Legal Opinions as

warranted. Mr. McCormick regularly attends Peconic Estuary MS4 Meetings to participate in watershed MS4 opportunities.

5.5.6 GEORGE WOODSON, HIGHWAY DEPARTMENT SUPERINTENDENT –Mr. Woodson is an elected Superintendent of the Town of Riverhead Highway Department. Mr. Woodson, since becoming the superintendent of Highways has diligently dedicated staff to the maintenance of MS4 structures. Mr. Woodson sends staff to training on MS4 operations, good housekeeping and IDDE. HwY staff contact the Engineering Department with potential illicit discharge issues.

5.5.7 MICHAEL REICHEL, SANITARY SEWER DISTRICT SUPERINTENDENT – Mr. Reichel is the superintendent to the Town's two sewer districts, the Riverhead Sewer District (RSD) and the Calverton Sewer District (CSD). There are two wastewater treatment plants (WWTP) within each district and the RSD also runs a scavenger waste plant which takes in sewage from pump trucks. Mr.Reichel has provided his staff and assistance to the Engineering Department and the Highway Department in the use of the camera, smoke testing and dye testing for tracking potential illicit discharges.

5.6 FUNDING

5.6.1 OPERATIONAL COSTS – The Town currently funds personnel from the Engineering Department and the Town Attorney's Office that work on MS4 Permit requirements through its operating budget. In 2011, the Town hopes to segregate out a separate Stormwater Staff allocation to better track resources used in this program. The sewer department and highway department staff are funded through the Town operational costs but are paid for through separate taxing districts. MS4 cleaning operations, IDDE program requirements, SWPPP review and inspections, public pamphlets and posters and other public education and involvement activities are funded out of operational costs.

5.6.2 CAPITAL IMPROVEMENT COSTS – Large scale projects such as infrastructure replacement and watershed improvement strategy implementations are generally paid out of a Capital Improvement Project (CIPs). Generally CIPs are funded through either bonding or town budgets coupled with grant monies (shared).

5.6.3 GRANT OPPORTUNITIES – The Town has had great success in securing grant funds for the implementation of MS4 projects. The Town has purchased boater pumpout boats, and boater pumpout stanchions through grant monies. The Town has performed stormwater retrofits out of grant monies.

5.7 PROCEDURES FOR IDENTIFYING AND LOCATING ILLICIT DISCHARGES (TRACKDOWN)

5.7.1 POLLUTION REPORTING HOTLINE - The ToR maintains a website and public access television channel. In September 2010, the Town will revise the website page to include a dedicated call in number to report potential illicit discharges to the Engineering Department. The Engineering Department telephone line is currently listed on all of the educational pamphlets that are available at Town facilities that experience a large amount of public traffic. This information along with educational video programs will be posted to our Channel 22 television station.

When a telephone call or statement is made of a potential illicit discharge, the Engineering Department personnel as listed in Section 4, will begin an *Illicit Discharge Hotline Incident Tracking Sheet* (IDHTS). The IDHTS will be initially be filled out with the reporter's information (see Figure 6).

Figure 6-1 – Illicit Discharge Hotline Incident Tracking Sheet

Illicit Discharge Hotline Incident Tracking Sheet

Incident ID:

Responder Information	
Call taken by:	Call date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time:	Incident date:
Caller contact information (*optional*):	

Incident Location *(complete one or more below)*

Latitude and longitude:			
Stream address or outfall #:			
Closest street address:			
Nearby landmark:			
Primary Location Description	**Secondary Location Description:**		
☐ Stream corridor *(In or adjacent to stream)*	☐ Outfall	☐ In-stream flow	☐ Along banks
☐ Upland area *(Land not adjacent to stream)*	☐ Near storm drain	☐ Near other water source (storm water pond, wetland, etc.):	
Narrative description of location:			

Upland Problem Indicator Description

☐ Dumping	☐ Oil/solvents/chemicals	☐ Sewage
☐ Wash water, suds, etc.	☐ Other: _____	

Stream Corridor Problem Indicator Description

Odor	☐ None	☐ Sewage	☐ Rancid/Sour	☐ Petroleum (gas)
	☐ Sulfide (rotten eggs); natural gas	☐ Other: Describe in "Narrative" section		
Appearance	☐ "Normal"	☐ Oil sheen	☐ Cloudy	☐ Suds
	☐ Other: Describe in "Narrative" section			
Floatables	☐ None:	☐ Sewage (toilet paper, etc)	☐ Algae	☐ Dead fish
	☐ Other: Describe in "Narrative" section			

Narrative description of problem indicators:

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Investigation Notes	
Initial investigation date:	Investigators:
☐ No investigation made	Reason:
☐ Referred to different department/agency:	Department/Agency:
☐ Investigated: No action necessary	
☐ Investigated: Requires action	Description of actions:
Hours between call and investigation:	Hours to close incident:
Date case closed:	
Notes:	

5.7.2 DRAINAGE AREA INVESTIGATIONS – Following the initial call and beginning of a IDHTS, the Engineering Department will perform a desk top review of all information pertinent to the land area reported. The Town will utilize the GIS system to determine local land use, permitted facilities (NYSDEC/ACOE), property ownership, aerial review and what stormwater infrastructure is within this area.

5.7.3 TRUNK INVESTIGATIONS AND ON SITE DISCHARGE INVESTIGATIONS - Once the background information is determined a inspection crew will be deployed to perform trunk investigations and site discharge investigations. The Engineering Department will consult with the Town Attorney's office to discuss the project and any legal issues associated with the project. Considerations shall be given to type of mode of entry, flow type and frequency. If the illicit discharge is within the system and not from an apparent property connection, than a trunk investigation will be initiated with the aid of the Highway

Department and GIS to determine the next upstream structure that shows the illicit flow. When a structure is encountered that does not show the illicit flow, than the connection will lie somewhere between the two. At this point in time, the Engineering Department along with the Highway Department and the Sewer Department will utilize the pipe camera to determine the size and type of connection. The Town will then begin the on-site investigation to determine the actual source of the illicit connection from within the private property through either smoke or dye testing.

5.7.4 SEPTIC SYSTEM INVESTIGATIONS - The ToR has a Town Code Chapter 88 entitled Sewers (Appendix A). Paragraph 41 of this chapter allows for the inspection at a rate of once per five years by the Town of Riverhead. Within this code, the frequency, right of entry and right to remove grass, topsoil and/or dirt shall be allowed. The Town will consider amending this code in 2010 to allow for a third party consultant in the form of a licensed plumber to certify septic systems and provide this report to the Town to include the following information:

Type of Structures – quantity and locations
Inlets/Outlets – quantity and locations
General assessment of structural integrity and if any outlets occur past the last mapped leaching pool.

These will be submitted to the Sewer District and then be further distributed to the Engineering Department for database filing purposes.

5.8 PROCEDURES FOR ELIMINATING ILLICIT DISCHARGES

5.8.1 CHAPTER 109 OF TOWN CODE – In 2007, the Town Board adopted by resolution a new Town Code Chapter -109 entitled Storm Sewers (Appendix B). Within this new code, illicit discharges were defined along with several other terms. The Town's procedures for eliminating illicit discharges are outlined in this chapter and address the ToR's ability to access facilities, to suspend access to the MS4, allow for connection permits the ToR's Enforcement procedures outlining a penalty fee schedule.

5.9 PROCEDURES FOR DOCUMENTING ACTIONS

5.9.1 A HOTLINE CALL activates the following procedures:

5.9.1.1 DATE CALL IS LOGGED – registered on the IDHTS

5.9.1.2 DRAINAGE AREA INVESTIGATION initiated and conducted – information compiled in a file folder

5.9.1.3 TRUNK LINE SURVEY – documented by both the IDHTS and a photo summary

5.9.1.4 PRIVATE PROPERTY SURVEY- documented by the IDHTS and a photo summary.

5.9.1.5 If VIOLATION is determined then SMO may order compliance by Written Notice of Violation (NOV) with an outline of corrective measures to be taken and timeframe of compliance.

If a violation has not been corrected pursuant to the requirements set forth in the NOV, the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonable necessary to abate the violation. If there is refused access to the property, the Town may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. If the violation has occurred, the Town will seek a court order to take action to reasonably abate the violation to restore the property. The cost of these measures shall be the sole responsibility of the property owner.

5.10 PENALTIES

5.10.1 FIRST OFFENSE – a fine not exceeding $1,000 or imprisonment for a period not to exceed 2 months.

5.10.2 SECOND OFFENSE – within five years, punishable by a fine not less than $1,000 or more than $2,500 or imprisonment for a period not to exceed two months , or both.

5.10.3 THIRD OFFENSE- within a period of five years, punishable by a fine not less than $2,500 nor more than $5,000 or imprisonment for a period not to exceed two months or both.

5.11 WATERSHED MAPPING

The size of a watershed is closely related to the network of streams contained within its borders. Streams with no upstream tributaries are designated as first-order streams down to their first confluence. A second-order stream is formed when two first-order streams meet.

Watershed – Generally, this is the largest management unit that falls within the local land use planning authority. A community might have one or more watersheds within its borders, depending on its size.

Sub-watershed – The scale encompassed by the watershed. Its boundaries include all land area draining to the point where two second-order streams come together to form a third-order stream. In most regions, sub watersheds are a few square miles in area and are drained by a stream several feet in width.

The Town will work on mapping out the watersheds that discharge to the impaired waterbodies as a first priority. This will aid in determining where illicit discharges originate from in the infrastructure system has been mapped out.

The Peconic Estuary Program sponsored the Meetinghouse Creek Watershed Management Plan, prepared by Horsley Witten Group in July 2006. This watershed delineation has been

incorporated into the Town's GIS system. The Town is currently pursuing grant monies to fund Watershed Management Plans for both Terry's Creek and Sawmill Creek.

5.12 ILLICIT DISCHARGE EDUCATION

The BMP committee is currently developing a program to educate the public on the dangers of Illicit Discharges. This would provide a partnership which would enhance their wildlife education program. The Town would incorporate information received on non point source pollution in the Peconic Estuary and what elements which should be emphasized the most.

Riverhead School District – the BMP Committee will pursue a partnership with the school district. This would allow the SMO to interact with teachers of Elementary Science, and Earth Science to inform children the measures that the Government is taking and how they can help the process by not littering, maintaining good housekeeping at home, becoming alert on what illicit discharges are and saying something if they see something, as well as spreading the information on to their relatives.

5.12.1 POTENTIAL DETECTORS OF ILLICIT DISCHARGE

The BMP committee has recognized that certain Town functions can be utilized to detect forms of illicit discharge such as the Highway Department, Buildings and Grounds Division, and the Emergency Services (Police, Ambulance, Fire Depts.). The areas which would be most likely to be illicit discharges would be older industrial areas and older residential communities.

5.12.2 HIGHWAY DEPARTMENT

The Town Highway Department maintains the Town's MS4 system. Typical maintenance operations that the Hwy Dept. performs includes but is not limited to:

5.12.2.1 STREET SWEEPING – During street sweeping operations, the operator is traveling at a slow rate of speed. The operator actively looks for non-MS4 pipes draining to the MS4, overland discharges draining to the MS4, etc. There is a running list maintained at the Hwy Dept. that describes any activities, items that are potential illicit discharges. If there are items of major concern that are discharges of strong odor, or color, the Hwy Dept. contacts the SMO, if it is an immediate potential hazard, the Fire Marshal's office is contacted.

5.12.2.2 DRAINAGE STRUCTURE CLEANING - Hwy Dept. actively cleans out drainage infrastructure. The Hwy Dept. currently maintains three vacuum trucks that are utilized for removing debris that has accumulated in drainage catch basins, leaching pools, and manholes. The Hwy Dept, has been provided with overviews and on going training on how to detect a potential illicit discharge. During cleaning operations, if they observe dry weather flow, additional pipes in the structures, or foul odors, they maintain a list of the structure number, and location. There is a running list maintained at the Hwy Dept. that describes any activities, items that are potential illicit discharges. If there are items of major concern that are discharges of strong odor, or color, the Hwy Dept. contacts the SMO, if it is an immediate potential hazard; the Fire Marshal's office is contacted.

5.12.3 BUILDINGS AND GROUNDS DIVISION

B&G maintains the Town's buildings and grounds, including all parks. Maintenance of the parks includes the drainage infrastructure. When drainage structures require cleaning, B&G assesses the conditions, then contacts the HWY dept. During cleaning operations, if they observe dry weather flow, additional pipes in the structures, or foul odors, they maintain a list of the structure number, and location. There is a running list maintained at the Hwy Dept. that describes any activities, items that are potential illicit discharges. If there are items of major concern that are discharges of strong odor, or color, the Hwy Dept. contacts the SMO, if it is an immediate potential hazard; the Fire Marshal's office is contacted.

5.12.4 EMERGENCY SERVICES

The Town's Emergency Services include the Police Department, Fire Marshal's Office, Fire Department and Ambulance Department. During motor vehicle accidents, they are the first responders, and are able to assess the immediate affects of the accident. If there are any penetrations to holding tanks of the vehicles they alert appropriate departments albeit the NYSDEC, Highway Department, B&G to protect the Town's MS4 system and the environment. If during the assessment, they observe dry weather flow, they will contact the Fire Marshal's Office or the SMO depending on the severity of the issue.

5.13 EVALUATING AND MEASURING PROGRESS

During a 2010 EPA audit and review of the Town's program, it was determined that the Town's methods of evaluating and measuring progress were deficient. The Town as a standard operating procedure will adopt a policy of revising the SWMP on an annual basis to review the program and its effectiveness and change the program as needed to address deficiencies. As part of these revisions, the Town will incorporate new measurements and evaluations to track progress. As part of this Minimum Control Measure the town will begin the following actions to evaluation progress:

The Town will begin a measurement and evaluation procedures for the following actions:

- Track the number of outfalls monitored on an annual basis, increased tracking during wet weather and dry weather and reduction in connections observed will be the evaluation.
- Track in a simple database the number of complaints we receive through Code Enforcement, Hotline and track which complaints were valid. Tracking the percentages of sites with actual IDDE's vs. invalid complaints.
- Develop a map that shows the locations of reported spills, overflows, ID's and other water quality problems, the evaluation will be the annual occurrences of these and if they are decreasing.

5.13.1 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 1, the Town will supply the DEC with the following information:

- Approximate percentage and numbers of outfalls mapped
- Number of outfalls screened for dry weather discharges during reporting period
- Types of generating sites/ sewersheds targeted for inspection during this reporting period;

- Types of illicit discharges found during the reporting period
- Quantity of illicit discharges/potential illegal connections that have been detected during this reporting period
- Quantity of illicit discharges/illegal connection have been eliminated during this reporting period
- If the storm sewershed mapping has been completed
- If the information is available on GIS
- What percent of staff in relevant positions and departments have received IDDE training.

6. MINIMUM CONTROL MEASURE 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

6.1 INTRODUCTION

This minimum control measure is intended to reduce the amount of sediment generated from construction sites (erosion control) and reduce the off-site transport of sediment and construction – related chemicals (sediment and chemical control). This measure should be utilized to influence conceptual design drawings to develop a sustainable site, and protect the watershed.

Several pollutants of concern are associated with construction activities, including the following: sediment; pesticides; fertilizers used for vegetative stabilization; petrochemicals (oils, gasoline, and asphalt degreasers); construction chemicals such as concrete products, sealers, and paints; wash water associated with these products; paper; wood; garbage; and sanitary waste (Washington State Department of Ecology, 1991). "Erosion rates from natural areas such as undisturbed forested lands are typically less than 1 ton/acre/year, whereas erosion from construction sites ranges from 7.2 to 500 tons/acre/year" (USEPA, 2005).

6.2 TOWN CODE AMENDMENTS

On December 18, 2007, the Town of Riverhead adopted local law for the addition of "Chapter 110 – Stormwater Management and Erosion and Sediment Control Regulations" of the Riverhead Town Code. Chapter 110 was modeled after the State policies and procedures for Site Developers to prepare a Storm Water Pollution Prevention Plan (SWPPP) for review by the Town of Riverhead. The local law, located in Appendix E was then modified in December 2008, to outline fees, and escrow accounts to be set up for the review and inspection of these sites as they become developed. There are several districts in which the Town code encourages pervious parking areas and/or landscaped areas for drainage where sanding and salting are not used in the winter.

6.3 EDUCATION

Construction site operators, design engineers, municipal staff and other individuals will be trained in sediment and erosion control practices either through the NYSDEC, USEPA, or Geological Group. In May 2010, the Town will require certification of training prior to ground disturbance. The Town has adopted a tracking system where by an email or telephone call is placed to local contractors working within the Town of Riverhead to ascertain on an annual basis how many field personnel are certified in the four hour course. As new education training programs become available, an email is placed to all contractors.

6.4 PROGRAM

The Town has prepared informational pamphlets for developers entering either the Planning Department and /or the Building Department for permits. The goal of the pamphlets is to inform the

developers of the procedural requirements of SWPPP reporting, inspection, best management practices in the layout of site plan features, construction activities, and post-construction considerations.

6.4.1 BEST MANAGEMENT PRACTICES – DURING SITE DESIGN

Best Management Practices – During Site Design / SWPPP Review

- Site layout – The site should be laid out holistically so that the drainage is in the naturally low lying portion of the property and receives pre-treatment of storm water prior to infiltration.
- Minimize clearing and grading – This will minimize disruption of the natural features to remain.
- Encourage green measures to reduce runoff quantity such as planted roofs, rain gardens, swales, etc.
- Protect waterways and stabilize drainage ways
- Establish Plan review and modification procedures
- Design drainage system in accordance with stormwater runoff treatment of water quality volume (WQv) requirements not necessarily straight infiltration.
- Ensure proper clearing limits in accordance with local zoning requirements.
- On long or steep, disturbed, or man-made slopes, construct benches, terraces, or ditches at regular intervals to intercept runoff.
- Use retaining walls
- Provide linings (grass/sod/rip-rap) for urban runoff conveyance channels.
- Use check dams
- Use mulches
- Use sodding for permanent stabilization.
- Use wildflower cover to reduce the need for irrigation
- Develop and implement a spill control plan
- Develop and implement a waste disposal control plan
- Develop procedures for disposal of concrete truck waste

6.4.2 BEST MANAGEMENT PRACTICES – DURING CONSTRUCTION

Best Management Practices – During Construction

- Phase construction to limit soil exposure
- Stabilize exposed soils immediately
- Protect steep slopes and cuts
- Install perimeter controls to filter sediments
- Employ advanced sediment – settling controls.
- Assess erosion and sediment control practices after storm events
- Ensure SWPPP implementation bi- weekly inspections
- Adequate construction entrance stabilization.
- Locate potential pollution sources away from steep slopes, water bodies, and critical areas;
- Protect natural vegetation with fencing, tree armoring, and retaining walls or tree wells.
- Stockpile topsoil and reapply as a soil amendment to reestablish vegetation.
- Use wind erosion controls
- Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drain.

- Seed disturbed areas
- Install erosion control blankets
- Provide education and training opportunities for construction personnel – by May 2010 any construction site operator will have to provide certification to the Town of Riverhead that they have received sediment and erosion control training by either a New York State agency, or Soil Conservation Agency prior to commencing site work.

6.5 EVALUATING AND MEASURING PROGRESS

During a 2010 EPA audit and review of the Town's program, it was determined that the Town's methods of evaluating and measuring progress were deficient. The Town as a standard operating procedure will adopt a policy of revising the SWMP on an annual basis to review the program and its effectiveness and change the program as needed to address deficiencies. As part of these revisions, the Town will incorporate new measurements and evaluations to track progress. As part of this Minimum Control Measure the town will begin the following actions to evaluation progress:

- Track the number of SWPPPs Received the evaluation will be the number of revisions/SWPPP prior to MS4 Acceptance. The long term evaluation should be a decrease in the number of revisions as the local engineers become more familiar with the process. This information shall be provided in Appendix E.
- The Town has prepared a simple database of SWPPPS, this database includes the SWPPPs received and tracks the number of inspections performed by the job per year. The long term evaluation will be the percentage of construction sites in compliance. This information shall be provided in Appendix E.
- The Town will begin tracking the amount of contractors within the Town with the 4 hour sediment and erosion control class. As it has been a requirement that a full time supervisor be on site during construction activities since May 2010, the Town will track as a percentage of the full time field personnel per company who has received training. The long term evaluation of this measurement will be 100% of field personnel trained. The Town proactively sends notices of local courses to local contractors.

6.6 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 4, the Town will supply the DEC with the following information:

- If the Town has adopted a law that provides equal protection to the NYS SPDES General Permit
- Does that Town have a SWPPP review procedure in place
- How many SWPPPS have been reviewed in the reporting period
- Does the Town have a mechanism for receipt and consideration of public comments related to construction SWPPPs
- Does the Town provide education and training for contractors about the local SWPPP process
- Identify the types of enforcement actions used during the reporting period for construction activities.
- How many projects have been authorized for disturbances of one acre or more.
- How many construction projects disturbing at least one acre were active in your jurisdiction during this reporting period
- What percent of active construction sites were inspected during this reporting period
- What percent of active construction sites were inspected more than once.
- Do all inspectors working for the Town use the NYS Construction Stormwater Inspection Manual

7. MINIMUM CONTROL MEASURE 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT

7.1 INTRODUCTION

This minimum control measure addresses runoff from projects after the construction phase is complete. In some cases, construction and post-construction BMPs can be located in the same area, however it is being found that construction and post construction BMPs should be located on different parts of the site and have different sizing and design criteria. In the past, more emphasis has been made on stormwater volume instead of water quality issues. The majority of the Town of Riverhead's stormwater is infiltrated by way of recharge basins with no pre-treatment.

7.2 NON STRUCTURAL BEST MANAGEMENT PRACTICES

Non structural BMPs are measures that communities may take to protect water quality. These often include land preservation, conservation, recycling activities. These can be implemented with volunteer groups working with Town Government, the enactment of Town Code amendments, zoning restrictions, and education.

7.2.1 LAND PRESERVATION IN IMPAIRED WATERSHEDS

The Town has created two committees in its efforts to preserve property through the purchase of open space and development rights on agricultural lands. The Open Space Committee (Chapter 14) and Farmland Preservation Committee (Chapter 44), meet once a month to review applications to preserve open space and farmland. The Town had previously utilized Peconic Land Trust to promote and educate land owners and farmers of the opportunity to participate in the program, now local volunteers participate I the program as being open space and farmland committee members. The open space and farmland committees review the parcels, conduct site visits, rank or rate the parcels and vote to recommend to the Town Board the most viable options. Thereafter, the Town via resolution votes to hold a public hearing so the public may participate or express opinion regarding the preservation of a particular parcel. If approved, the Town Board will adopt a resolution approving the purchase and authorize the Supervisor to execute a contract to purchase the parcel.

7.2.2 TOWN CODE AMENDMENTS

On December 18, 2007, the Town adopted a local law for the addition of Chapter 110 (located in Appendix E) entitled Stormwater Management and Erosion and Sediment Control. As part of this code amendment, the Town requires the owner/operator of the permanent stormwater management practices installed in accordance with Town Code to ensure they are operated and maintained to achieve the goals of the chapter and require the owner / operator to prepare and maintain on site a preventative/corrective maintenance program for all critical facilities and systems of treatment and control which are installed or used by the owner/operator to achieve the goals. In addition, the owner/operator shall enter into a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the Suffolk County Clerk as a deed restriction on the property prior to the final plan approval.

7.2.3 ZONING

There are certain districts within the Town where owner operators are encouraged to utilize permeable pavers, porous concrete, and gravel for parking areas. In addition, site

developers are often encouraged to utilize depressed areas within the landscaped areas as stormwater retention areas.

7.2.4 PUBLIC EDUCATION

The Town will continue to utilize public education by way of pamphlets, posters, and seminars to inform people that everyone can make a difference. Simple ways to manage stormwater in both residential and commercial sites is to utilize practices to minimize impervious areas, clearing practices and to utilize practices to enhance the site landscaping such as rain gardens, wet ponds which can be incorporated into the landscaping scheme.

7.3 STRUCTURAL BEST MANAGEMENT PRACTICES

Structural BMPs are actions that can be implemented during design/construction and are structural in nature to treat both storm water quantity and quality. They are sized based upon the volume of water that they can accommodate.

7.3.1 DRY DETENTION POND

Dry detention ponds are vegetated basins designed to fill during storm events and slowly release the water over a number of hours.

7.3.1.1 OPERATION AND MAINTENANCE

All facility components, vegetation, and source controls shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and two times per year thereafter, within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. Components to be inspected include but are not limited to: pond inlet, forebay, embankment, dikes, berms, side slopes, control devices, overflow structure, sediment and debris management.

7.3.2 WET PONDS AND EXTENDED WET DETENTION PONDS

Wet ponds are constructed with a permanent pool of water (called pool storage or dead storage). Stormwater runoff enters the pond at one end and displaces water from the permanent pool. Pollutants are removed from stormwater through gravitational settling and biologic processes.

7.3.2.1 OPERATION AND MAINTENANCE

All facility components, vegetation, and source controls shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and two times per year thereafter, within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. Components to be inspected include but are not limited to: pond inlet, forebay, embankment, dikes, berms, side slopes, control devices, overflow structure, sediment and debris management.

7.3.3 FILTRATION PRACTICES

Filtration practices are a low impact way of filtering stormwater into the groundwater. The concept is to slow the water velocity through use of a parallel conveyance of the stormwater, as the water flows across, it also infiltrates down, the slow release is helps contaminants cling to soil particles, or become ingested by plants.

7.3.3.1 GRASSED SWALES

Grassy swales are long narrow grassy depressions used to collect and convey stormwater runoff, allowing pollutants to settle and filter out as the water infiltrates into the ground or flows through the facility. In addition to providing pollution reduction, flow rates and volumes can also be managed for small process (<15,000 square feet of impervious surface) with grassy swales. Swales can be used to fulfill a site's required landscaping area requirement.

Operation and Maintenance – The swale should drain within 48 hours of a storm event. All facility components, including but not limited to vegetation, source controls, swale inlet, side slopes, swale media, and swale outlet shall be inspected for proper operations and structural stability, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.3.3.2 SAND FILTERS

There are two sand filter options. One is designed with an impervious bottom or is placed on an impervious surface. It can be used for all soil types. The other option, for native soils with a minimum infiltration rate of 2 inches per hour (NRCS soil types A and B), allows filtered water to infiltrate into the ground. For both options, pollutant reduction is achieved as the water filters through the sand; flow control is obtained by slowing the discharge rate as the water filters through the sand. Filters may be constructed in-ground or above grade. Because they include a waterproof lining, sand filters are extremely versatile and can be used next to foundation walls, adjacent to property lines or on slopes. An overflow to an approved conveyance and disposal method is required.

Operation and Maintenance – All facility components including but not limited to vegetation, filter inlet, reservoir, filter media, under-drain piping, and overflow or emergency spillway shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, and 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.3.3.3 INFILTRATION PLANTER

Infiltration planters are structural landscaped reservoirs used to collect, filter, an infiltrate stormwater runoff, allowing pollutants to settle and filter out as the water percolates through the planter soil and infiltrates into the ground. In addition to providing pollution reduction, flow rates and volumes can also be managed with infiltration planters. Planters can be used to help fulfill a site's required landscaping area requirement and should be integrated into the overall site design.

Operation and Maintenance – Water should drain through the planter within 3 - 4 hours after a storm event. All facility components including but not limited to downspout, splash blocks, planter reservoir, filter media, planter, overflow pipe, and

vegetation shall be inspected for proper operations and structural stability. These inspections shall occur, at a minimum, quarterly for the first 2 years from the date of installation, 2 times per year thereafter, and within 48 hours after each major storm event. The facility owner must keep a log, recording all inspection dates, observations, and maintenance activities.

7.4 STORMWATER RETROFITTING

The MS4 requirements pertain to new development and redevelopment projects. Redevelopment cases, in particular are places where retrofitting can play a major role. For instance, existing stormwater facilities and/or conveyance systems can be retrofitted to provide better water quality treatment.

7.4.1 RETROFITTING PROTOCOLS

The Town shall establish retrofitting protocols for redevelopment sites beginning in 2009. The Town will establish construction measures that developers can utilize in redevelopment projects on how to deal with roof runoff, parking lot runoff etc.

7.4.2 MUNICIPAL RETROFIT

The Town shall implement a program to build retrofitting into the Town facilities, capital improvements and facilities maintenance program. In 2009, the Town will begin by constructing a rain garden to accommodate the stormwater runoff from the Stotzky Recreational Park Tennis Courts. The Town will continue to retrofit stormwater facilities as it is economically feasible. Public education an involvement is most probable in low impact areas such as roof runoff.

7.5 EVAULATING AND MEASURING PROGRESS

During a 2010 EPA audit and review of the Town's program, it was determined that the Town's methods of evaluating and measuring progress were deficient. The Town as a standard operating procedure will adopt a policy of revising the SWMP on an annual basis to review the program and its effectiveness and change the program as needed to address deficiencies. As part of these revisions, the Town will incorporate new measurements and evaluations to track progress. As part of this Minimum Control Measure the town will begin the following actions to evaluation progress:

- Begin meeting with Home Owner's Associations regarding best management practices for stormwater abatement. The Town will track the number of meetings per year with the attendance recorded.
- The Town will progress the priority of drainage problems and set a goal of cleaning and restoring a minimum of two recharge basins per year. Where appropriate and/or feasible, sediment forebays will be incorporated into the system. We will then track if flooding is reduced in these areas.
- Incorporate best management practice of swales along farm lands where there is a history of flooding, once Highway Department and/or land owner has implemented, the Town will track area after heavy rain events.
- Begin program where coastal and/or low lying neighborhoods bordering on creeks or other natural wetlands to improve flood protection measures, then implement annual cleaning event to remove debris and identify any erosion areas and restore. The Town's goal is to implement one event per year and track effectiveness in reducing flooding.

7.6 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 5, the Town will supply the DEC with the following information:

- How many and what type of post-construction stormwater management practices has the Town inventoried, inspected, implemented in the period
- Does the Town use GIS or spreadsheets to track post-construction BMPs, inspections and maintenance.
- What types of non-structural practices have been used to implement the Low Impact Development/Better Site Design/Green Infrastructure principles.

8. MINIMUM CONTROL MEASURE 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

8.1 INTRODUCTION

This minimum control measure is intended to prevent or reduce nonpoint source pollutant loadings generated from a variety of activities within urban areas. Everyday activities of municipal employees and businesses have the potential to contribute to nonpoint source pollutant loadings. These activities include improper use and disposal of household chemicals, lawn and garden maintenance, turf grass management, operation and maintenance of diesel, and gasoline vehicles, illicit discharges to the MS4, commercial activities and improper pet waste disposal. Performing these activities in an environmentally responsible manner potentially will improve

8.2 OBJECTIVES

- To design and implement an operation and maintenance program to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal operations and facilities.
- Include training in the program on pollution prevention and good housekeeping techniques in municipal operations;
- Select and implement management practices for pollution prevention and good housekeeping in municipal operations; and
- Develop measurable goals to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.

8.3 TOWN FACILITIES AND OPERATIONS

The Town has many facilities which it operates for public interaction;

Town Hall
Town Hall West
Recreation Department
Riverhead Water District
Riverhead Sewer District
Riverhead Highway Dept.
Riverhead Municipal Garage
Buildings and Grounds Division
Electrical Service Division

Recreation Centers
George Young Community Ctr
Henry Phieffer Community Ctr
Senior Center

8.4 BUILDING MAINTENANCE

The Town Buildings and Grounds Division (B&G) maintains all Town buildings in terms of maintenance and repairs. In 2008, we began pursuing LEED for Building Maintenance activities. As buildings require renovations, the Town attempts (to the maximum extent practicable) to comply with

LEED requirements. We are employing LEED maintenance procedures with GS-37 labeled cleaning solvents, and only ordering enough to maintain buildings for a 6 month time frame. LIPA has conducted energy audits for all facilities, the Engineering Department has been incorporating their recommendations as buildings go through renovations and/or repairs. The Recreation Department which was replaced in 2007, converted to a gas HVAC system. The interior lighting has been converted to high effienciency bulbs in Town Hall, Town Hall West, Senior Center, Highway Department and the Recreation Department.

When existing mercury containing lighting is at the end of its useful life albeit fluorescent interior lighting or exterior street lights, the Town stores these materials for pick up by a registered / licensed recycling facility in accordance with the Federal legislation. The Town utilizes the Suffolk County Requirements Contract for these services.

8.5 TOWN PARKS

B&G also maintains all of the Town Parks. The maintenance crew supervisors are licensed to place fertilizers and herbicides through the NYSDEC. In the past two years, these supervisors have attended organic turf management seminars, and are beginning to utilize organics at one location in Stozky Park. Since organics need to be established over a three year period in order to bring the quality of turf to current standards, we are phasing it in. The B&G division under the direction of the Engineering/SMO office is working to alter certain riverfront parks to deter geese populations from staying on the riverfront and defecating.

8.5.1 GRASS MOWING

B&G bags grass clipping after mowing Town Parks. They maintain stockpiles within Stotzky Park where they combine with mulch and make their own blend of a compost/ mulch which they install on the planting beds along Main Street, Polish Town and other areas where the Town maintains annual plants. They maintain approximately 10 mowers. These mowers are maintained by the B&G, with regular inspections for leaks, and efficient operation.

8.6 ROADWAY MAINTENANCE

8.6.1 GRASS MOWING

The Highway Dept also owns and maintains approximately 5 mowers which are utilized to mow the Right of Ways (ROWs) of the Towns roadway system.

8.6.2 TREE TRIMMING

The HWY Dept. maintains the trees within the ROWs. Maintenance of the trees includes removing dead trees and removing damaged or deteriorated tree limbs which potentially could fall in the roadway causing damage and possible injury. Organic waste is brought to the Yard Waste area of the Landfill.

8.6.3 ROAD KILL REMOVAL

The HWY Dept. removes all dead animals that have been struck and killed by motor vehicles within the roadway. This operation is generally performed by 2 staff members they have all attended and received training in pollution prevention, good housekeeping and stormwater management. The carcasses are brought to an animal cemetery that has been established near the Town's Landfill, and approved by the New York State Department of Environmental Conservation.

8.6.4 STREET SWEEPING

The Highway Department performs the street sweeping operations. There are currently three Hwy Dept. street sweepers in the Town, they are regularly maintained by the Municipal Garage. There are four staff members that run these sweepers, they have all attended and received training in pollution prevention, good housekeeping and stormwater management. This staff actively maintains records on when and where they have swept and how much debris they have swept off the roadway.

8.6.5 WINTER ROAD MAINTENANCE

The Town is in the planning phase for rehabilitation of the Town's main Highway facility on Osborne Avenue. The rehabilitation would include new salt/storage barns, which would include storage of calcium chloride. This would be stored in a double walled container under a roofed structure. Additional improvements to the facility would include additional vehicle bays for washing and storage. The rehabilitation would reduce the potential for any adverse impacts to human health and environment for the storage of sodium chloride and calcium chloride.

Alternatives: Alternatives to the use of sodium chloride and calcium chloride include magnesium chloride which is essentially equivalent to the two compounds the Town uses in terms of costs and corrosion, as well as calcium magnesium acetate (CMA) and urea. CMA is a biodegradable material made from limestone and acetic acid, and is considered a viable alterative to solid and liquid de-icers due to its low environmental impact. However, this compound melts at a slower rate than conventional salts and is on average 15 to 30 times the cost of conventional salts. Therefore, the Town does not use this material due to fiscal constraints, and vehicular safety concerns. Urea is utilized by airports for de-icing of planes and runways. Due to the high nutrient concentrations, the Town would not utilize this in and around wetlands, as the Town has TMDL's for pathogens on Peconic River, Terry's Creek, and Sawmill Creek.

8.6.6 STORMWATER SYSTEM MAINTENANCE

In the past, cleaning of the stormwater system was sporadic and on an "as needed basis". In the past two years, the Highway Department has developed a policy in which it deploys both the street sweepers and vacuum trucks that it has in inventory. The streets are regularly swept and a log is kept on the roadways, and the residential subdivisions swept. Streets are typically swept after winter maintenance to remove the sand and salt debris, and a few times throughout the year.

Drainage basin cleanings are scheduled during non-freezing temperatures and are logged as to the dates, in coming pipes information. Cleaners inspect for construction types, potential illicit connections, and structural integrity. In the next two years, the Town will incorporate its cleaning, inventory progress in the GIS System.

8.7 EVAULATING AND MEASURING PROGRESS

During a 2010 EPA audit and review of the Town's program, it was determined that the Town's methods of evaluating and measuring progress were deficient. The Town as a standard operating procedure will adopt a policy of revising the SWMP on an annual basis to review the program and its effectiveness and change the program as needed to address deficiencies. An annual reminder will be posted on Microsoft Outlook to remind us of the revision process. As part of these revisions, the

Town will incorporate new measurements and evaluations to track progress. As part of this Minimum Control Measure the town will begin the following actions to evaluation progress:

- Create database of Town Facilities that are un-manned to include but not be limited to items such as park equipment, sanitary facilities, lawn care, garbage pickup and proposed Best Management Practices to be incorporated in future. These facilities will be evaluated on an annual basis to inspect for sanitary functionality, potential erosion and whether Canadian Geese have become an issue. These sheets will be included Appendix D.
- Create in 2011 a method of informing new employees of stormwater issues prior to commencing work. A simple handout will be distributed regarding duties of work that may effect stormwater such as graffiti removal, operating equipment etc., a survey will be given at this time and the new employee will be given 20 minutes to complete. The survey will be reviewed to analyze information in handout is adequate and if the employee has a general understanding of requirements.
- Enhance the annual training to be more departmental specific. Incorporate surveys at the end of each training of Highway, Buildings and Grounds, Sanitation, Sewer and Water to ascertain if material presented was understood. A database will be maintained on training activities, and the percentage of department will be tracked. The Town will strive for 100% of field personnel receiving annual training by 2013. This information will be provided in Appendix I.
- Establish policies and procedures for operations including graffiti removal, simple in house construction activities.
- Continue to track quantity of tones cleaned from streets for street sweeping. Long term evaluation shall be that with increased cleaning of roadways following winter road maintenance there will be a reduction in isolated flooding events.
- Develop simple database of vehicle and tool assets per department and begin to track maintenance and develop policy of purchasing new equipment and vehicles based on age of equipment, miles and/or hours of use, and what new equipment should be equipped with to enhance stormwater facility maintenance such as having decanters on sweepers and what type of vac trucks are most efficient. This information will be included in Appendix I.
- Continue to track quantity of tons cleaned out of drainage basins. Long term evaluation shall be that with increased cleaning of system there will be a reduction in isolated flooding events.

8.8 ANNUAL REPORT

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 6, the Town will supply the DEC with the following information:

- List each municipal operation/facility that contributes or may potentially contribute POCs to the MS4 system.
- List of Municipal Operations good housekeeping programs
  - Acres of parking lots swept
  - Miles of street swept
  - Inspections of Post Construction Control Practices
  - Lbs of Phosphorus applied in chemical fertilizer
  - Lbs of nitrogen applied in chemical fertilizer
  - Lbs of pesticide/herbicide applied as pure product
- Quantity of stormwater management trainings have been provided to municipal employees.
- Date of last training
- Quantity of municipal employees have been trained in this reporting period
- Percentage of municipal employees in relevant positions and departments receiving stormwater management training.

APPENDIX A

NYSDEC SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) – Permit No. GP-0-10-002

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

from

MUNICIPAL SEPARATE STORM SEWER SYSTEMS
(MS4s)

Permit No. GP-0-10-002

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: May 1, 2010
Modified Date:

Expiration Date: April 30, 2015

Address:

John Ferguson
Chief Permit Administrator

NYS DEC
Div. Environmental Permits
625 Broadway
Albany, N.Y. 12233-1750

10-14-11

Date

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), operators of *small municipal separate storm sewer systems* ("small MS4s"), located in *urbanized areas* ("UA") and those *additionally designated* by New York State are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System* ("NPDES") permit or by a state permit program. New York's *State Pollutant Discharge Elimination System* ("SPDES") is an NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law* ("ECL").

Only those *small MS4 operators* who *develop* and *implement* a *stormwater management program* (SWMP) and obtain permit coverage in accordance with Part II of this *SPDES general permit* are authorized to *discharge stormwater* from their *small MS4* under this *SPDES general permit*.

A *covered entity* authorized under GP-0-08-002 as of the effective date of GP-0-10-002, shall be permitted to discharge in accordance with the renewed permit, GP-0-10-002, upon the submission of their Annual Report, unless otherwise notified by the *Department*.

An *operator* not authorized under GP-0-10-002 may[1] obtain coverage under this *SPDES general permit* by submitting a Notice of Intent (NOI) to the address provided on the NOI form. For newly regulated MS4s, authorization under this *SPDES general permit* is effective upon written notification from the *Department* of the receipt of a complete NOI. Copies of this *SPDES general permit* and the NOI for New York are available by calling (518) 402 - 8109 or at any Department of Environmental Conservation (*Department*) regional office (Appendix A). They are also available on the *Department*'s website:

http://www.dec.ny.gov/permits/6045.html

Submitting an NOI is an affirmation that an initial *SWMP* has been *developed* and will be *implemented* in accordance with the terms of this *SPDES general permit*.

*** Note: all italicized words within this *SPDES general permit* are defined in Part X. Acronyms and Definitions.**

[1] The term "may is used to recognize that there are circumstances under which the *operator* is ineligible for coverage under this *g SPDES general permit* because of exclusionary provisions of this permit. *Operators* that are excluded from coverage under this *SPDES general permit* as provided for in Part I, for example, are not authorized to *discharge* under this permit. This clarification also applies to situations in which an NOI has been submitted; submission of an NOI by an entity excluded from *SPDES general permit* coverage does not authorize the *small MS4* to *discharge stormwater* runoff under the authority of this *SPDES general permit*

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

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Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

1. This *SPDES general permit* authorizes *discharges* of *stormwater* from *small municipal separate storm sewer system*s ("MS4"s) as defined in 40 CFR 122.26(b)(16), provided all of the eligibility provisions of this *SPDES general permit* are met.

2. Exempt Non-Stormwater Discharges. The following non-stormwater *discharges* are exempt from the need for *SPDES general permit* coverage unless the *Department* has determined them to be substantial contributors of pollutants to a particular *small MS4* applying for coverage under this *SPDES general permit*. If the *Department* determines that one or more of the *discharges* listed below is a substantial contributor of pollutants to a *small MS4*, the identified *discharges* will be considered *illicit*. In that event, the *covered entity* must eliminate such discharges by following the *illicit discharge* minimum control measure ("MCM") requirements (See Part VII.A.3 or VIII.A.3, and Part IX.A.3, B.3, C.3, and D.3 where applicable).

   a. water line flushing
   b. landscape irrigation
   c. diverted stream flows
   d. rising ground waters
   e. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
   f. uncontaminated ground water
   g. discharges from potable water sources
   h. foundation drains
   i. air conditioning condensate
   j. irrigation water
   k. springs
   l. water from crawl space and basement sump pumps
   m. footing drains
   n. lawn and landscape watering runoff provided that all pesticides and fertilizers have been applied in accordance with the manufacturer's product label;
   o. water from individual residential car washing
   p. flows from riparian habitats and wetlands
   q. dechlorinated swimming pool discharges
   r. residual street wash water
   s. discharges or flows from fire fighting activities

(Part I.A.2.)

t. dechlorinated water reservoir discharges
u. any SPDES permitted discharge.

Even if the non-stormwater discharges are determined not to be substantial contributors of pollutants, the *Department* recommends that the *covered entity's stormwater management program* ("SWMP") include public education and outreach activities directed at reducing pollution from these discharges.

B. Limitations on Coverage

The following are not authorized by this *SPDES general permit*:

1. *Stormwater discharges* whose unmitigated, direct, indirect, interrelated, interconnected, or interdependent impacts would jeopardize a listed endangered or threatened species or adversely modify designated critical habitat;

2. *Stormwater discharges* or *implementation* of a *covered entity's SWMP*, which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless the covered entity is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts;

3. *Stormwater discharges* to territorial seas not of the State of New York, the contiguous zone, and the oceans unless such *discharges* are in compliance with the ocean *discharge* criteria of 40 CFR 125 subpart M;

4. *Stormwater discharges*, the permitting of which is prohibited under 40 CFR 122.4 and/ or the *ECL*;

C. Exemption Criteria

For *stormwater discharges* from a designated *small MS4* that are mixed with non-*stormwater* or *stormwater* associated with *industrial activity*, the *Department* may determine them to be exempt from the requirements of this *SPDES general permit* if the *discharges* are:

1. Effectively addressed by and in compliance with a different *SPDES general permit* or an *individual SPDES permit*; or

2. Identified by and in compliance with Part I.A.2 of this *SPDES general permit*.

Part II. OBTAINING PERMIT COVERAGE

A. Permit coverage is obtained by submission of a complete and accurate Notice Of Intent.

B. Permit coverage is public noticed by the Department.

NOIs will be public noticed and an opportunity for public comment provided on the contents of submitted NOIs.

a. NOIs and the location of the SWMPs and Annual Reports for existing MS4s will be posted in the Environmental Notice Bulletin (ENB).

b. A deadline of 28 calendar days from the posting in the ENB will be provided for receiving comments.

c. After the public comment period has expired, the *Department* may extend the public comment period, require submission of an application for an individual SPDES permit or alternative *SPDES general permit*, or accept the NOI or SWMP as complete.

C. Continuance of Permit Coverage for Covered Entities Authorized by GP-0-08-002 (Continuing Covered Entities)

As of May 1, 2010, entities with coverage under GP-0-08-002 will continue to have authorization to discharge on an interim basis for up to 180 days from the effective date of this *SPDES general permit*. Covered entities may gain coverage under this *SPDES general permit* by submission of their 2009 Annual Report due in June 2010. For public participation purposes, the updated Annual Report will be considered equivalent to submission of an NOI.

When the operator changes, a new operator is added, or the individual responsible for the SWMP changes, these changes must be indicated on the MCC form submitted in accordance with Part V.D. It is not necessary to submit a revised Notice of Intent (NOI).

D. Permit Coverage for Covered Entities Newly Designated Under GP-0-10-002 (Small MS4s not Previously Authorized by GP-0-08-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-08-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-08-002, but were granted a waiver from that requirement;

- were not required to gain coverage under GP-0-08-002 based on the designation criteria, but they are now within an *Additionally Designated Area*; or

(Part II.D.)

- were otherwise not permitted under GP-0-08-002.

1. In order for *stormwater discharges* from *small MS4s* to be newly authorized under this *SPDES general permit*, an *operator* must:

   a. within 180 days of receiving written notification from the *Department* that a permit for discharges from MS4s is required, prepare an NOI using the form provided by the *Department* (or a photocopy thereof); and

   b. submit the NOI, signed in accordance with Part VI.J of this *SPDES general permit*, to:

      NOTICE OF INTENT
      NYS DEC, Bureau of Water Permits
      625 Broadway, 4th Floor
      Albany, NY 12233-3505

2. *Operators* who submit a complete NOI in accordance with the requirements of this *SPDES general permit* are authorized to *discharge stormwater* from *small MS4s,* under the terms and conditions of this *SPDES general permit,* upon written notification from the Department that a complete NOI has been received.

E Small MS4s Not Required to Gain Coverage

Operators of unregulated *small MS4s* may apply for coverage under this *SPDES general permit* at any time, per Part II.B.

F. Extension of Permit Coverage to Covered Entity's Full Jurisdiction

Operators of traditional land use control MS4s must extend the implementation of minimum control measures (MCMs) 4 and 5 in accordance with *Criterion 3* of the Designation Criteria or apply for a waiver, if eligible.

Operators of all regulated *small MS4*s may also extend the implementation of any of the six MCMs to areas under their control, but outside of the existing area covered by this *SPDES general permit*. This may be done by describing the program components (MCMs) being extended and the geographic extent to which they are being extended in the annual report (Part V.C.) and indicating in the Municipal Compliance Certification (MCC) form (Part V.D.) that the program was extended to the *covered entity's* full jurisdiction.

(Part II.)

G. Single Entity to Cover the MS4

A single entity may gain coverage for, and on behalf of, one or more regulated MS4s to implement a part of an MCM, one, or all the MCMs. A single entity shall be defined by watershed, municipal boundaries, special district boundaries, or other specifically defined boundaries. The single entity must demonstrate to the *Department* that it was formed in accordance with applicable state and/or local legislation, and that it has the legal authority and capacity (financial, resources, etc.) to meet the requirements of this *SPDES general permit*. Depending on the MCM(s) implemented, the single entity shall demonstrate that it has the following capacities, as applicable for each MCM that the single entity is seeking coverage under this SPDES general permit:

1. Initiate and administer appropriate enforcement procedures,
2. Collect, finance, bond or otherwise borrow money for capital projects,
3. Control the management and operation of the storm sewer system,
4. Implement best management practices at all municipal facilities discharging to the MS4, and
5. Obtain access to property that may be necessary for siting stormwater management facilities and/or practices.

The single entity must submit a complete NOI form to the *Department*, detailing which of the regulated MS4s it will gain coverage for and which of the MCMs, or parts of MCMs, it will implement for each particular regulated MS4. A copy of the document forming the single entity, and detailing the legal authority and capacity of the single entity, must be attached to the NOI. Prior to the single entity gaining coverage under this SPDES general permit, each regulated MS4, for which the single entity will implementing one or more MCM must submit a complete notice of termination (NOT). This notice shall specify which of the minimum control measures the single entity will implement for the MS4 and which of the minimum control measures the MS4 will implement.

Part III. SPECIAL CONDITIONS

A. Discharge Compliance with Water Quality Standards

Where a *discharge* is already authorized under this *SPDES general permit* and is later determined to directly or indirectly cause or have the reasonable potential to cause or contribute to the violation of an applicable *water quality standard*, the *Department* will notify the *covered entity* of such violation(s) and may take enforcement actions for such violations. The *covered entity* must take all necessary actions to ensure future *discharges* do not directly or indirectly cause or contribute to the violation of a *water quality standard*, and the *covered entity* must document these actions in the *SWMP*.

(Part III.A.)

Compliance with this requirement does not preclude, limit, or eliminate any enforcement activity as provided by the Federal and / or State law for the underlying violation. Additionally, if violations of applicable water quality standards occur, then coverage under this *SPDES general permit* may be terminated by the *Department* in accordance with 750-1.21(e), and the Department may require an application for an alternative *SPDES general permit* or *individual SPDES permit* may be issued.

B. Impaired Waters

1. Impaired Waters Without Watershed Improvement Strategies or Future TMDLs

If a *small MS4 discharges* a stormwater pollutant of concern (POC) to an *impaired* water listed in Appendix 2, the covered entity must ensure no net increase in its *discharge* of the listed *POC* to that water.

By January 8, 2013, *covered entities* must assess potential sources of discharge of stormwater *POC*(s), identify potential stormwater pollutant reduction measures, and evaluate their progress in addressing the POC(S). Newly authorized covered entities must perform the above tasks within 5 years after gaining coverage under this SPDES general permit. Covered entities must evaluate their *SWMP* with respect to the MS4's effectiveness in ensuring there is no net increase discharge of stormwater *POC*(s) to the impaired waters for *storm sewersheds* that have undergone non-negligible changes such as changes to land use and impervious cover greater than one acre, or stormwater management practices during the time the MS4 has been covered by this *SPDES general permit*. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that *discharge* to the listed waters (see Appendix 2). The assessment shall be done using *Department* supported modeling of pollutant loading.

If the modeling shows increases in loading of the POC, the SWMP must be modified to reduce the loading to meet the no net increase requirement. The subsequent annual reports must contain an assessment of priority stormwater problems, potential management practices that are effective for reduction of stormwater POC(s), and document a gross estimate of the extent and cost of the potential improvements.

2. Watershed Improvement Strategies

The *SWMP*s for *covered entities* in the watersheds listed below must be modified to comply with the following requirements and the watershed improvement strategies. *Covered entities* implementing the pollutant-specific BMPs in addition to the BMPs required of all *covered entities* will be taking satisfactory steps towards achieving compliance with TMDL requirements. *Covered entities* under the MS4 *SPDES general*

(Part III.B.2.)

permit are required to make best efforts to participate in locally based watershed planning efforts that involve the NYSDEC, other covered entities, stakeholders and other interested parties for implementation of load reduction BMPs. Covered entities may form a Regional Stormwater Entity (RSE) to implement stormwater retrofits collectively. The *covered entities* must ensure that discharges of the *POC* to the *TMDL* waterbody are reduced through these or additional changes to the *SWMP* so that the waste load allocation is met.

MS4s are required to meet the reduction of the POC defined by the TMDL program defined in Part IX of this *SPDES general permit*. By the deadlines defined in Part IX of the general permit, *covered entities* must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC*(s) to *TMDL* water bodies. Newly designated watershed improvement strategy areas must perform the assessment within 5 years from authorization under this SPDES general permit. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL* watershed. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*. The *covered entities* or an RSE must prepare and implement, participate in or utilize the results of existing or ongoing ambient water quality monitoring programs to validate the accuracy of models and evaluate the effectiveness of the additional BMPS for watershed improvement strategies.

If the modeling shows that loading of the POC is not being reduced to meet the waste load allocation, the SWMP must be modified to reduce the pollutant loading to meet the waste load allocation.

Each regulated MS4 is responsible for an individual load reduction, which is a fraction of the total required load reduction in the TMDL. If MS4s form an RSE and stormwater retrofits are approached collectively, the *Department* would allow compliance with this condition of the SPDES general permit to be achieved on a regional basis.

In this case the load reduction requirement for each participating MS4 will be aggregated, to create an RSE load reduction, to allow design and installation of retrofits where they are most feasible, without restricting MS4s to site retrofit projects within their municipal boundaries.

Each member of an RSE is in compliance if the aggregate reduction number associated with the retrofit plans is met. If the aggregate number is not met, each of the participating MS4s would be deemed non-compliant until such time as they had met their individual load reduction requirements.

(Part III.B.2.)

a. New York City Watershed East of the Hudson River
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.A to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. A map of the watershed is shown in Appendix 3.

b. Other Phosphorus Watersheds
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.B to address phosphorus as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendices 4, 5, and 10.

c. Pathogen Watersheds
Covered entities shall modify their SWMP to meet the additional requirements as set forth in Part IX.C to address pathogens as the *POC* for the portion of their *storm sewershed* in any of the watersheds. Maps of the watersheds are shown in Appendices 6, 7, and 9.

d. Nitrogen Watersheds
Covered entities shall modify their *SWMP* to meet the additional requirements as set forth in Part IX.D to address nitrogen as the *POC* for the portion of their *storm sewershed* in the watershed. Maps of the watersheds are shown in Appendix 8.

3. Future TMDL Areas
If a *TMDL* is approved in the future by EPA for any waterbody or watershed into which a *small MS4 discharges*, the *covered entity* must review the applicable *TMDL* to see if it includes requirements for control of *stormwater discharges*. If a *covered entity* is not meeting the *TMDL* wasteload allocations, it must, within 180 days of written notification from the *Department*, modify its *SWMP* to ensure that the reduction of the *POC* specified in the *TMDL* is achieved. It will be the MS4's obligation to meet the waste load allocations specified in the TMDL through modification of its *SWMP plan* according to the schedule of Part IX of this *SPDES general permit.*

Modifications must be considered for each of the six MCMs. Refer to assistance documents or enhanced requirements for specific pollutants in documents on the *Department*'s website for modifications specific to the *TMDL*. Revised *SWMPs* must include updated schedules for implementation.

(Part III.B.3.)

Within three years of having modified its SWMP to ensure that reduction of the POC specified in the TMDL is achieved, covered entities in future TMDL areas must assess their progress and evaluate their *SWMP* to determine the *MS4's* effectiveness in reducing their discharges of *TMDL POC*(s) to *TMDL* water bodies. This assessment shall be conducted for the portions of the *small MS4 storm sewershed* that are within the *TMDL* watershed. The assessment shall be done using *Department* supported modeling of pollutant loading from the *storm sewershed*.

Part IV. Stormwater Management Program (SWMP) Requirements

A. SWMP Background

Covered entities must *develop (for newly authorized MS4s* , *implement)*, and enforce a *SWMP* designed to reduce the *discharge* of pollutants from *small MS4s* to the *maximum extent practicable* ("MEP") in order to protect water quality and to satisfy the appropriate water quality requirements of the *ECL* and the CWA. The objective of the permit is for MS4s to assure achievement of the applicable water quality standards. *Covered entities* under GP-0-08-002 must have prepared a *SWMP plan* documenting modifications to their *SWMP*. See Part X.B. (Definitions) for more information about the *SWMP* and *SWMP plan*.

The *SWMP* and *SWMP plan* may be created by an individual *covered entity,* by a shared effort through a group or coalition of individual *covered entities,* or by a third party entity. The *SWMP plan* shall be made readily available to covered entity's staff, to the public and to *Department* and EPA staff.

B. Cooperation Between Covered entities Encouraged

The *Department* encourages *covered entities* to cooperate when *developing* and *implementing* their *SWMP*[2]. However, each *covered entity* is responsible for obtaining its own permit coverage and for filing its own NOI. Irrespective of any agreements between *covered entities*, each individual *covered entity* remains legally responsible for satisfying all GP-0-10-002 requirements and for its own *discharges*. If one *covered entity* is relying on another *covered entity* to satisfy one or more of its permit obligations, that fact must be noted on the *covered entity's* MCC form. The other entity must, in fact, *implement* the MCM(s) and must agree to *implement* the MCM(s) on the first *covered entity's* behalf. This agreement between the two or more parties must be documented

[2] For example, villages are encouraged to cooperate with towns, towns with counties, and adjacent counties with each other. In addition, municipal governments are encouraged to coordinate and cooperate with *non-traditional MS4s* such as DOT, school and fire districts, Federal and State facilities located within and adjacent to their jurisdictions. Sewer boards, water boards, or other non-traditional entities are encouraged to partner with the municipality (municipalities) that they serve.

in writing and signed by both (all) parties. Part IV.G. below may apply if such an agreement

(Part IV.B.)

is not already in place. The agreement must be included in the *SWMP plan*, and be retained by the *covered entity* for the duration of this *SPDES general permit*, including any administrative extensions of the permit term.

Covered entities that are working together to *develop (for newly authorized MS4s)* or *implement* their *SWMP*s are encouraged to complete shared annual reports. *Covered entities* may also hold a group meeting to present their annual reports to the public and to receive comments on their annual reports. These options are discussed in more detail in Part V.C.2.

C. SWMP Coverage Area

At a minimum, *covered entities* are required to *develop (for newly authorized MS4s)* and *implement SWMP*s in the automatically designated *urbanized areas* ("UA") and *additionally designated* areas (40CFR Section 122.32(a)(1) or 122.32(a)(2)) under their jurisdiction[3].

SWMP coverage shall include all UA or additionally designated areas within the *covered entity*'s jurisdiction that drain into their *small MS4* and subsequently *discharge* to *surface waters of the State* directly or through other *small MS4s*.

Operators of *small MS4s* whose jurisdiction includes regulated and unregulated areas are encouraged to include their entire jurisdiction in their *SWMP* (refer to Part II.D).

D. SWMP Development and Implementation for Covered entities Authorized by GP-0-08-002(Continuing Covered entities)

Covered entities authorized under GP-0-08-002 shall continue to fully *implement* their *SWMP,* unless otherwise stated in this *SPDES general permit*. A *covered entity* may modify its *SWMP* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be reported to the *Department* in the MS4's

[3] The purpose of this section is to minimize conflicts between adjacent *small MS4s*. For the purposes of this *SPDES general permit*, areas under the *covered entity's* jurisdiction shall mean areas where the legal authority exists for the subject *covered entity* to *develop* and *implement* an *SWMP* including the six MCMs. It is not a permit requirement for *covered entities* to *implement* and enforce any portion of their *SWMP* in any area that is under the jurisdiction of another *covered entity*. For example, if a portion of a town drains directly into a stormwater system owned and operated by the State DOT, and this area of the town is regulated, the DOT will not be required to implement and enforce any portion of a *SWMP* in the area lying outside of its right of way. In this case, the town would be required to implement the program in the subject area in accordance with this *SPDES general permit*, this despite the fact that the subject drainage does not directly enter the town's system.

annual report and Municipal Compliance Certification (MCC) form (See Part V.C and V.D).

(Part IV.)

E. SWMP Development and Implementation for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-08-002)

Certain *small MS4s* designated by 40CFR Section 122.32(a)(1) were not authorized by GP-0-08-002, but are now required to gain coverage under this *SPDES general permit*. The *small MS4s* were not previously authorized because they were either:

- required to gain coverage under GP-0-08-002, but were granted a waiver from that requirement;
- were not required to gain coverage under GP-0-08-002 based on the designation criteria, but they now meet the additional designation criteria in NYS DEC "Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems" ; or
- were otherwise not permitted under GP-0-08-002.

Operators of *small MS4s* newly regulated under this *SPDES general permit* must *develop* an initial *SWMP* and provide adequate resources to fully *implement* the *SWMP* no later than three years from the date of the individual MS4's authorization.

A newly regulated *covered entity* may modify its *SWMP* to comply with the terms and conditions of this *SPDES general permit* if it determines changes are needed to improve *implementation* of its *SWMP*. Any changes to a *SWMP* shall be documented in the *SWMP plan* and reported to the *Department* in the annual report (See Part V.C).

Covered entities are required to make steady progress toward full *implementation* in the first three years after the date of authorization. Full *implementation* of *SWMP*s for newly regulated *small MS4s* is expected no later than three years from the date of coverage under this *SPDES general permit*.

F. Minimum Control Measures

Each *covered entity* is required to develop *(for newly authorized MS4s)* and implement a *SWMP* that satisfies the requirements for each of six required program components, known as minimum control measures (MCMs).

The MCMs for *traditional land use control MS4s* are listed in Part VII. The MCMs for *traditional non-land use control MS4s* and *non-traditional MS4s* are listed in Part VIII. Additional MCMs that *covered entities* in watersheds with improvement strategies must address, referred to in Part III.B.2, are described in Part IX.

(Part IV.)

G. Reliance Upon Third Parties

This section applies when a *covered entity* relies upon any third party entity to *develop* or *implement* any portion of its *SWMP*. Examples of such entities include, but are not

limited to a non-government, commercial entity that receives payment from the *covered entity* for services provided (for example businesses that create policies or procedures for *covered entities*, perform illicit discharge identification and track down, maintain roads, remove snow, clean storm sewer system, sweep streets, etc as contracted by the covered entity).

The covered entity must, through a signed certification statement, contract or agreement provide adequate assurance that the third parties will comply with permit requirements applicable to the work performed by the third party. The certification statement, contract or other agreement must:

- provide adequate assurance that the third party will comply with permit requirements;
- identify the activities that the third party entity will be responsible for and include the name and title of the person providing the signature;
- the name, address and telephone number of the third party entity;
- an identifying description of the location of the work performed; and
- the date the certification statement, contract or other agreement is signed.

Example certification language is provided below:

Contracted Entity Certification Statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the (covered entity's name) stormwater management program and agree to implement any corrective actions identified by the (covered entity's name) or a representative. I also understand that the (covered entity's name) must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from the Municipal Separate Storm Sewer Systems ("MS4s") and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any non-compliance by (covered entity's name) will not diminish, eliminate, or lessen my own liability."

Part V. PROGRAM ASSESSMENT, RECORD KEEPING, REPORTING AND CERTIFICATION REQUIREMENTS

A. Assessment

Covered entities are required to collect and report information about the *development* and *implementation* of their SWMPs. Specific information the *small MS4s* are required to collect is identified in Parts VII or VIII, depending on the type of *small MS4*. The *small MS4s* are encouraged to collect additional information that will help them evaluate their *SWMP*. Collection of information over time will facilitate the evaluation of the *covered entity's SWMP* by allowing the examination of trends in the information collected.

The *covered entity* must conduct an annual evaluation of its program compliance, the appropriateness of its identified *BMPs*, meeting new permit requirements, and progress towards achieving its identified *measurable goals*, which must include reducing the *discharge* of pollutants to the *MEP*.
Where the evaluation shows that the SWMP is not reducing discharges to the *MEP*, the SWMP shall be revised to reduce discharges to the *MEP*. Update to the SWMP and the SWMP plan must be completed within a year from the annual evaluation of their SWMP with an implementation schedule no later than 3 years from the annual evaluation.

B. Recordkeeping

The *covered entity* must keep records required by this *SPDES general permit* (records that document *SWMP*, records included in *SWMP plan*, other records that verify reporting required by the permit, NOI, past annual reports, and comments from the public and the *Department*, etc.) for at least five (5) years after they are generated. Records must be submitted to the *Department* within 5 business days of receipt of a *Department* request for such information. The *covered entity* shall keep duplicate records (either hard copy or electronic), to have one copy for public observation and a separate working copy where the *covered entity's* staff, other individuals responsible for the *SWMP* and regulators, such as *Department* and EPA staff can access them. Records, including the NOI and the *SWMP plan*, must be available to the public at reasonable times during regular business hours.

C. Annual Reporting

1. Annual Report Submittal

The annual reporting period ends March 9 of each year. The annual report must be received in the *Department*'s Central Office, electronic or hard copy, no later than June 1 of each reporting year. If electronic, submit in accordance with procedures set forth by the *Department*. If mailed, send to the address below:

(Part V.C.1.)

NYS DEC "MS4 Coordinator"
Bureau of Water Permits
625 Broadway, 4th Floor
Albany, NY 12233-3505

Failure to submit a complete annual report and a complete MCC form (Part V.D) shall constitute a permit violation.

a. **Annual Report Submittal for Newly Regulated Covered entities (Small MS4s not Previously Authorized by GP-0-08-002)**
Newly regulated covered entities *developing* their *SWMP* are to submit their Annual Report in a format provided by the *Department*. They will provide, at a minimum, the information on the annual report form and the information required by Parts VII or VIII.

Newly regulated *covered entities* are required to submit their first annual report the year that authorization is granted if authorization is granted on or before December 31 of that reporting year.

b. **Annual Report Submittal for Covered entities Authorized by GP-0-08-002 (Continuing Covered entities)**
Beginning with annual reports due in 2010 *covered entities* implementing their *SWMP* shall submit, at a minimum, information specified by the *Department* in Part VII or VIII in a format provided by the *Department*.

2. **Shared Annual Reporting and Submittal**
Covered entities working together to *develop (for newly authorized MS4s)* and /or *implement* their *SWMP*s may complete a shared annual report. The shared annual report is an annual report that outlines and explains group activities, but also includes the tasks performed by individual *covered entities* (*BMPs, measurable goals*, schedules of planned activities, etc.). To facilitate the submission of one annual report for the entire group of *covered entities*, individual *covered entity's* activities may be incorporated into the report by either:

- providing the details specific to their *small MS4*(s) to a person(s) who incorporates that information into the group report. That one group report is submitted to the *Department* for all participating *small MS4s*; or
- providing the details specific to their *small MS4*(s) on a separate sheet(s) that will be attached with the one group report.

(Part V.C.2.)

Regardless of the method chosen, each *covered entity* must, by June 1 of the annual reporting year:

a. Provide their individual MCC form (see Part V.D) to be submitted with the shared annual report. Each *covered entity* must sign and submit an MCC form to take responsibility for all of the information in the annual report, which includes specific endorsement or acceptance of the shared annual report on behalf of the individual *covered entity*;

b. Present their draft annual report at a meeting (see Part VII.A.2.d or Part VIII.A.2.d for more information). For completed shared annual reports, the report may be presented by each participating individual *covered entity* at an existing *municipal* meeting or may be made available for comments on the internet. Additionally, *covered entities* participating in shared annual reporting may combine meetings to have a group or regional meeting. While the group meeting is allowable, each *covered entity* shall ensure that local public officials and members of the public are informed about the program, activities and progress made; and

c. Submit a summary of any comments received and (intended) responses on the individual *covered entity*'s information or the shared annual report information, as applicable. This information should be included with the annual report submission. Changes made to the *SWMP* in response to comments should be described in the annual report.

3. Annual Report Content

The annual report shall summarize the activities performed throughout the reporting period (March 10 to March 9) and must include at a minimum:

a. The status of compliance with permit conditions, including Watershed Improvement Strategy conditions;
b. An assessment/evaluation of:
   i. the appropriateness of the identified *BMPs*;
   ii. progress towards achieving the statutory goal of reducing the *discharge* of pollutants to the *MEP*; and
   iii. the identified *measurable goals* for each of the MCMs.

c. Results of information collected and analyzed, monitoring data, and an assessment of the *small MS4*'s *SWMP* progress toward the statutory goal of reducing the *discharge* of *pollutants* to the *MEP* during the reporting period. This could include results from required *SWMP* reporting, estimates of pollutant loading (from parameters such as identified illicit discharges, physically interconnected *small MS4*s that may contribute substantially to pollutant

(Part V.C.3.c.)

loadings from the *small MS4*) and pollutant load reductions (such as illicit discharges removed). This assessment may be submitted as an attachment;

d. When required to be completed, results of assessments of effectiveness in meeting no net increase requirements or TMDL loadings as required by III. B.1 and 2. These results must be submitted in evaluation forms and as an attachment;

e. A summary of the stormwater activities planned to be undertaken during the next reporting cycle (including an implementation schedule);

f. Any change in identified *BMPs* or *measurable goals* and justification for those changes;

g. Notice that a *small MS4* is relying on another entity to satisfy some or all of its permit obligations (if applicable);

h. A summary of the public comments received on this annual report at the public presentation required in Part VII.A.2. or VIII.A.2. And, as appropriate, how the *small MS4* will respond to comments and modify the program in response to the comments;

i. A statement that the final report and, beginning in 2009, the SWMP plan are available for public review and the location where they are available; and

j. The information specified under the reporting requirements for each MCM (Part VII or VIII).

D. Annual Report Certification

A signed original hard copy and a photocopy of the MCC form must be submitted to the *Department* no later than June 1 of each reporting year. If the annual report is mailed (Part V.C. above), the MCC form must be submitted with the annual report.

The MCC form, provided by the *Department*, certifies that all applicable conditions of Parts IV, VII, VIII and IX of this *SPDES general permit* are being *developed*, *implemented* and complied with. It must be signed by an individual as described in Part VI.J.2. The certification provided by the MCC form does not affect, replace or negate the certification required under Part VI.J(2)(d). If compliance with any requirement cannot be certified to on the MCC form, a complete explanation with a description of corrective measures must be included as requested on the MCC form.

Failure to submit a complete annual report (Part V.C.) and a complete MCC form shall constitute a permit violation.

Part VI. STANDARD PERMIT CONDITIONS

A. General Authority to Enforce

Three of the MCMs (illicit discharge detection and elimination, construction site *stormwater* runoff control and post-construction *stormwater* management) require local laws, ordinances or other regulatory mechanisms to ensure successful implementation of the MCMs. Some *covered entities*, however, are not enabled by state law to adopt local laws or ordinances. Those *covered entities* (typically non-traditional MS4s and traditional, non-land use control MS4s) are expected to utilize the authority they do possess to create or modify existing regulatory mechanisms, including but not limited to contracts, bid specifications, requests for proposals, etc. to ensure successful implementation.

B. Duty To Comply

A *covered entity* must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and the *ECL* and is grounds for enforcement action.

C. Enforcement

Failure of the *covered entity,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the *SPDES general permit* requirements contained herein shall constitute a permit violation. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Continuation of the Expired SPDES General Permit

This *SPDES general permit* expires five years from the effective date of this permit. However, an administratively extended *SPDES general permit* continues in force and effect until the *Department* issues a new permit, unless a *covered entity* receives written notice from the *Department* to the contrary. *Operators* of the *MS4s* authorized under the administratively extended expiring *SPDES general permit* seeking coverage under the new *SPDES general permit* must refer to the terms within the new *SPDES general permit* to continue coverage.

E. Technology Standards

Covered entities, in accordance with written notification by the *Department*, must comply with all applicable technology-based effluent standards or limitations promulgated by EPA pursuant to Sections 301 and 304 of the CWA. If an effluent standard or limitation more stringent than any effluent limitation in the *SPDES general permit* or controlling a pollutant not limited in the permit is promulgated or approved

after the permit is issued, the *SWMP plan* shall be promptly modified to include that effluent standard or limitation.

F. Need To Halt or Reduce Activity Not a Defense

It shall not be a defense for a *covered entity* in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this *SPDES general permit*.

G. Duty to Mitigate

The *covered entity* shall take all reasonable steps to minimize or prevent any *discharge* in violation of this *SPDES general permit* which has a reasonable likelihood of adversely affecting human health or the environment.

H. Duty to Provide Information

The *covered entity* shall, within five (5) business days, make available for inspection and copying or furnish to the *Department* or an authorized representative of the *Department* any information that is requested to determine compliance with this *SPDES general permit*. Failure to provide information requested shall be a violation of the terms of this *SPDES general permit* and applicable regulation.

I. Other Information

Covered entities who become aware of a failure to submit any relevant facts or have submitted incorrect information in the NOI or in any other report to the *Department* must promptly submit such facts or information.

J. Signatory Requirements

All NOIs, reports, certifications or information submitted to the *Department*, or that this *SPDES general permit* requires be maintained by the *covered entity*, shall be signed as follows:

1. Notices of Intent

All NOIs shall be signed by either a principal executive officer or ranking elected official. Principal executive officer includes (1) the chief executive officer of the municipal entity agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports Required and Other Information Requested

All reports required by this *SPDES general permit* and other information requested by the *Department,* including MCC forms (part V.D.), shall be signed by a person

(Part VI.J.2.)

described above or by a duly authorized representative of that person[4]. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in VI.J.1 above and submitted to the *Department*; and

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the *covered entity* (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the MCC form; and

d. **Changes to authorization.** If an authorization to discharge is no longer accurate because a different *covered entity* has responsibility for the overall operation of another *covered entity's* program, these changes must be indicated on the MCC form submitted to the *Department* per Part V.D.

e. **Initial signatory authorization or changes to signatory authorization.** The initial signatory authorization must be submitted to the *Department* with any reports to be signed by a signatory representative. If a signatory authorization under VI.J.2 is no longer accurate because a different individual, or position, has responsibility for the overall operation of the facility, a new signatory authorization satisfying the requirements of VI.J.2 must be submitted to the *Department* with any reports to be signed by an authorized representative.

f. **Certification.** Any person signing documents under paragraph VI.H shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the

[4]Positions that must be duly authorized include, but are not limited to, Environmental Directors, Deputy Supervisors, Safety and Environmental Managers, Assistant Directors, and Chief Health and Safety Officers.

(Part VI.J.2.f.)

information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information."

Under Part VI.J. (Signatory Requirements), it shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, and/or reports.

K. Penalties for Falsification of Reports

Article 17 of the *ECL* provides a civil penalty of $37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and / or imprisonment for falsifying reports required under this permit..

L. Oil and Hazardous Substance Liability

Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve the *covered entity* from any responsibilities, liabilities, or penalties to which it is or may be subject under section 311 of the CWA or section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

M. Property Rights

The issuance of this *SPDES general permit* does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it limit, diminish and / or stay compliance with any terms of this permit.

N. Severability

The provisions of this *SPDES general permit* are severable, and if any provision of this *SPDES general permit*, or the application of any provision of this *SPDES general permit* to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

O. Requiring an Individual Permit or an Alternative General Permit

1. In its sole discretion, the *Department* may require any person authorized by this *SPDES general permit* to apply for and/or obtain either an *individual SPDES permit* or an alternative *SPDES general permit*. Where the *Department* requires a *covered entity* to apply for an *individual SPDES permit*, the *Department* will notify such

person in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for filing the application, and a deadline not sooner than 180 days from covered entity's receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The *Department* may grant additional time to submit the application upon request of the applicant.

2. Any *covered entity* authorized by this *SPDES general permit* may request to be excluded from the coverage of this *SPDES general permit* by applying for an *individual SPDES permit or an alternative SPDES general permit*. In such cases, a *covered entity* must submit an individual application or an application for an alternative *SPDES general permit* in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the *Department* at the address for the appropriate Regional Office. The request may be granted by issuance of any *individual SPDES permit* or an alternative *SPDES general permit* if the reasons cited by the *covered entity* are adequate to support the request.

3. When an individual SPDES permit is issued to a discharger authorized to discharge under a *SPDES general permit* for the same discharge(s), the general permit authorization for outfalls authorized under the individual permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

P. Other State Environmental Laws

1. Nothing in this *SPDES general permit* shall be construed to preclude the institution of any legal action or relieve a *covered entity* from any responsibilities, liabilities, or penalties established pursuant to any applicable *State* law or regulation under authority preserved by section 510 of the CWA.

2. No condition of this *SPDES general permit* releases the *covered entity* from any responsibility or requirements under other environmental statutes or regulations.

Q. Proper Operation and Maintenance

A *covered entity* must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *covered entity* to achieve compliance with the conditions of this *SPDES general permit*. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems,

installed by a *covered entity* only when necessary to achieve compliance with the conditions of the *SPDES general permit*.

R. Inspection and Entry

The *covered entity* shall allow the Commissioner of NYSDEC, the Regional Administrator of the USEPA, the applicable county health department, or their authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the *covered entity's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this *SPDES general permit*;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, including records required to be maintained for purposes of operation and maintenance; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit.

S. Permit Actions

At the *Department*'s sole discretion, this *SPDES general permit* may be modified, revoked, suspended, or renewed for cause at any time.

T. Anticipated noncompliance

The covered entity shall give advance notice to the *Department* of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of planned changes or anticipated noncompliance does not limit, diminish and / or stay compliance with any terms of this permit.

U. Permit Transfers

Coverage under this *SPDES general permit* is not transferable to any person except after notice to the *Department.* The *Department* may require modification or revocation and reissuance of this SPDES general permit to change the responsible party and incorporate such other requirements as may be necessary.

Part VII. MINIMUM CONTROL MEASURES - TRADITIONAL LAND USE CONTROL

A. Traditional Land-Use Control MS4 Minimum Control Measures (MCMs)

These MCMs apply to *traditional land use control MS4s* (cities, towns, villages). The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Continuing covered entities were required to develop a SWMP with the MCM requirements below by January 8, 2008 (if authorized by GP-02-02) and within three years of gaining coverage (if authorized by GP-0-08-002). Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Notwithstanding any sooner deadlines contained elsewhere within this permit, newly regulated *covered entities* are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

The *covered entity* may *develop (for newly authorized MS4s)* and /or *implement* their *SWMP* within their jurisdiction on their own. The *covered entity* may also *develop (for newly authorized MS4s)* and / or *implement* part or all of their *SWMP* through an intermunicipal program with another *covered entity*(s) or through other cooperative or contractual agreements with third parties that provide services to the *covered entities*.

1. **Public Education and Outreach - SWMP Development / Implementation**
   At a minimum, all *covered entities* must:

   a. Identify *POCs*, waterbodies of concern, geographic areas of concern, target audiences;

   b. *Develop (for newly authorized MS4s)* and *implement* an ongoing public education and outreach program designed to describe to the general public and target audiences:
      i. the impacts of *stormwater discharges* on waterbodies;
      ii. *POC*s and their sources;
      iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater* runoff; and

(Part VII.A.1.b.)

iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);

c. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals*; and

d. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POC*s in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

e. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. list education / outreach *activities* performed for the general public and target audiences and provide any results (for example, number of people attended, amount of materials distributed, etc.);
ii. *covered entities* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
- IDDE education *activities* planned or completed for public employees, businesses, and the general public, as required by Part VII.A.3;
- construction site *stormwater* control training planned or completed, as required by Part VII.A.4; and
- employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6; and

To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by,
iii. report on effectiveness of program, *BMP* and *measurable goal* assessment; and
iv. maintain records of all training activities.

f. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:

(Part VII.A.1.f.i.)

Complete in Year 1 (report changes in Year 2 and 3 as needed):
- list (and describe if necessary) *POCs*;
- *development* of education and outreach program and *activities* for the general public and target or priority audiences that address *POC*s, geographic areas of concern, and / or *discharges* to *303(d)* / *TMDL* waterbodies;
- *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
  - IDDE education *activities* planned or completed for public employees, businesses, and the general public for IDDE, as required by Part VII.A.3;
  - Construction site stormwater control training planned or completed, as required by Part VII.A.4; and
  - employee pollution prevention / good housekeeping training planned or completed, as required by Part VII.A.6;

  To facilitate shared annual reporting, if the education and outreach activities above are developed by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.

ii. **program *implementation* reporting** as set forth in Part VII.A.1(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. **Public Involvement / Participation - SWMP Development / Implementation**
   At a minimum, all *covered entities* must:

   a. Comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*, when implementing a public involvement / participation program;

   b. *Develop (for newly authorized MS4s)* and *implement* a public involvement/participation program that:

      i. identifies key individuals and groups, public and private, who are interested in or affected by the *SWMP* ;

(Part VII.A.2.b.)

ii. identifies types of input the *covered entity* will seek from the key individuals and groups, public and private, to support *development* and *implementation* of the SWMP program and how the input will be used; and

iii. describes the public involvement / participation activities the *covered entity* will undertake to provide program access to those who want it and to gather the needed input. The activities included, but are not limited to a water quality hotline (report spills, dumping, construction sites of concern, etc.), stewardship activities like stream cleanups, storm drain marking, and volunteer water quality monitoring;

iv. provide the opportunity for the public to participate in the *development*, *implementation,* review, and revision of the *SWMP.*

c. **Local stormwater public contact.**
Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;

d. **Annual report presentation.**
Below are the requirements for the annual report presentation:

i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions about and make comments on the report. This can be done:

- at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board, such as planning, zoning or the town board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or

- on the internet by:
  - making the annual report available to the public on a website;
  - providing the public the opportunity to provide comments on the internet or otherwise; and

(Part VII.A.2.d.i.)

- making available the opportunity for the public to request an open meeting to ask questions about and make comments on the report. If a public meeting is requested by 2 or more persons, the covered entity must hold such a meeting. However, the covered entity need only hold a public meeting once to satisfy this requirement.

ii. provide public notice about the presentation, making public the following information when noticing the presentation in accordance with the local public notice requirements:

- the placement of the annual report on the agenda of this meeting or location on the internet;
- the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* do provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
- the date and time of the meeting or the date the annual report becomes available on the internet; and
- the availability of the draft report for prior review prior to the public meeting or duration of availability of annual report on the internet;

iii. the *Department* recommends that announcements be sent directly to individuals (public and private) known to have a specific interest in the *covered entity's SWMP*;

iv. include a summary of comments and (intended) responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and

v. ensure that a copy of the final report and, beginning in 2009, the SWMP plan are available for public inspection;

e. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

(Part VII.A.2.)

f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

g. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

   i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
   ii. comments received and intended responses (as an attachment);
   iii. public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a water quality hotline, the number and extent of storm drain stenciling); and
   iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.

h. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

   i. **program *development* deadlines and reporting**:
   Complete for Year 1, 2 and 3:
   - annual report presentation information (date, time, attendees);
   - comments received and intended responses (as an attachment);

   Complete by end of Year 2 (report changes by end of Year 3 as needed):
   - key stake holders identified;
   - *development* of public involvement / participation plan based on the *covered entity's* needs, *POCs*, target audiences, geographic areas of concern, *discharges* to *303(d)* / *TMDL* waterbodies; and
   - *development* of public involvement / participation *activities* (for example stream cleanups including the number of people participating, the number of calls to a dumping / water quality hotline, the number or percent of storm drains stenciled);

   ii. **program *implementation* reporting**, as set forth in Part VII.A.2(g) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

(Part VII.A.)

3. **Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation**

   At a minimum, all *covered entities* must:

   a. *Develop (for newly authorized MS4s), implement* and enforce a program to detect and eliminate *illicit discharges* (as defined at 40CFR 122.26(b)(2)) into the *small MS4*;

   b. *Develop (for newly authorized MS4s)* and maintain a map, at a minimum within the *covered entity's* jurisdiction in the *urbanized area* and *additionally designated* area, showing:

      i. the location of all *outfalls* and the names and location of all *surface waters of the State* that receive *discharges* from those *outfalls*;
      ii. by March 9, 2010, the preliminary boundaries of the *covered entity's storm sewersheds* have been determined using GIS or other tools, even if they extend outside of the *urbanized area* (to facilitate track down), and *additionally designated* area within the *covered entity's* jurisdiction; and
      iii. when grant funds are made available or for sewer lines surveyed during an illicit discharge track down, the *covered entity's* storm sewer system in accordance with available *State* and EPA guidance;

   c. Field verify *outfall* locations;

   d. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every *outfall* within the *urbanized area* and *additionally designated area* within the *covered entity's* jurisdiction at least once every five years, with reasonable progress each year;

   e. Map new *outfalls* as they are constructed or newly discovered within the *urbanized area* and *additionally designated area*;

   f. Prohibit, through a law, ordinance, or other regulatory mechanism, *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions. This mechanism must be equivalent to the *State's* model IDDE local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems". The mechanism must be certified by the attorney representing the *small MS4* as being equivalent to the *State*'s model illicit discharge local law. Laws adopted during the GP-02-02 permit cycle must also be attorney-certified as effectively assuring implementation of the *State*'s model IDDE law;

(Part VII.A.3.)

g. *Develop (for newly authorized MS4s)* and *implement* a program to detect and address non-stormwater *discharges,* including illegal dumping, to the *small MS4* in accordance with current assistance and guidance documents from the State and EPA. The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating *illicit discharges* (trackdown); procedures for eliminating *illicit discharges*; and procedures for documenting actions;

h. Inform public employees, businesses, and the general public of the hazards associated with illegal *discharges* and improper disposal of waste, and maintain records of notifications;

i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary;

j. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals*; and

k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

l. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and percent of *outfalls* mapped;
ii. number of *illicit discharges* detected and eliminated;
iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
iv. status of system mapping;
v. activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;
vi. regulatory mechanism status - certification that law is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier annual report); and
vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.

(Part VII.A.3.)

m. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program;
- describe priority areas of concern, available equipment, staff, funding, etc.;

Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):

- describe procedures for identifying and locating *illicit discharges* (trackdown);
- describe procedures for eliminating *illicit discharges*;
- describe procedures for enforcing against illicit dischargers;
- describe procedures for documenting actions;
- describe the program being developed for informing public employees, businesses, and the general public of hazards associated with illegal *discharges* and improper disposal of waste;

Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism status development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model IDDE law (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:
- number and percent of *outfalls* mapped; and

Complete by Year 3:
- *outfall* map.

ii. **program *implementation* reporting** as set forth in Part VIII.A.3(l) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - SWMP Development / Implementation
At a minimum, all *covered entities* must:
a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:

(Part VII.A.4.a.)

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001 or GP-0-10-001), unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
   - that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
   - if controlling such activities in a particular watershed is required by the *Department*;

iii. includes a law, ordinance or other regulatory mechanism to require a *SWPPP* for each applicable land disturbing activity that includes erosion and sediment controls that meet the *State's* most current technical standards:
   - this mechanism must be equivalent to one of the versions of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
   - equivalence must be documented
     -by adoption of one of the sample local laws without changes;
     - by using the NYSDEC Gap Analysis Workbook; or
     - by adoption of a modified version of the sample law, or an alternative law, and, in either scenario, certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws.

iv. contains requirements for construction site operators to implement erosion and sediment control management practices;

v. allows for sanctions to ensure compliance to the extent allowable by State law;

vi. contains requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality, pursuant to the requirement of construction permit;

vii. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPP*s to ensure consistency with *State* and local sediment and erosion control requirements;

(Part VII.A.4.a.vii.)

- ensure that the individuals performing the reviews are adequately trained and understand the *State* and local sediment and erosion control requirements;
- all *SWPPP*s must be reviewed for sites where the disturbance is one acre or greater; and
- after review of *SWPPP*s, the *covered entity* must utilize the "MS4 SWPPP Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;

viii. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site storm water runoff;

ix. describes procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water;
- the *covered entity* must ensure that the individual(s) performing the inspections are adequately trained and understand the *State* and local sediment and erosion control requirements. Adequately trained means receiving inspector training by a *Department* sponsored or approved training;
- all sites must be inspected where the disturbance is one acre or greater;
- *covered entities* must determine that it is acceptable for the owner or operator of a construction project to submit the Notice of Termination (NOT) to the *Department* by performing a final site inspection themselves or by accepting the Qualified Inspector's final inspection certification(s) required by the SPDES General Permit for Stormwater Discharges from Construction Activity. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J.) shall document their determination by signing the "MS4 Acceptance" statement on the NOT.

x. educates construction site owner / operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the *municipality's* construction *stormwater* requirements, when construction *stormwater* requirements apply, to whom they apply, the procedures for submission of *SWPPP*s, construction site inspections, and other procedures associated with control of construction stormwater;

(Part VII.A.4.a.)

xi. ensures that construction site operators have received erosion and sediment control training before they do work within the *covered entity's* jurisdiction and maintain records of that training. Small home site construction (construction where the Erosion and Sediment Control Plan is developed in accordance with Appendix E of the "New York Standards and Specifications for Erosion and Sediment Control") is exempt from the requirements below:
   - training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
   - the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
   - the *covered entity* may ask for a certificate of completion or other such proof of training; and
   - the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application;

xii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;

xiii. *develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

xiv. select and appropriate construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

b. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number of *SWPPPs* reviewed;
ii. number and type of enforcement actions;
iii. percent of active construction sites inspected once;
iv. percent of active construction sites inspected more than once;
v. number of construction sites authorized for disturbances of one acre or more; and
vi. report on effectiveness of program, *BMP* and *measurable goal* assessment.

c. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

(Part VII.A.4.c.)

i. **program *development* deadlines and reporting**:

Initiate by end of Year 1:

- procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

Complete in Year 1 (revise in Year 2 and 3 if changes are made):

- describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel;

Initiate by end of Year 1; complete by end of Year 3:

- regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

Initiate by end of Year 2; complete by end of Year 3:

- describe procedures for SWPPP review that incorporate consideration of potential water quality impacts and ensure consistency with local sediment and erosion control requirements;
- describe procedures for construction site inspections; and
- describe procedures for enforcement of control measures and sanctions to ensure compliance.

ii. **program *implementation* reporting** as set forth in Part VII.A.4(b) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period..

5. Post-Construction Stormwater Management - **SWMP Development/Implementation**

At a minimum, all *covered entities* must:

a. *Develop(for newly authorized MS4s)*, *implement*, and enforce a program that:

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities (either GP-02-01, GP-0-08-001, or GP-0-10-001), unless more stringent requirements are contained within this *SPDES general permit*;

ii. addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or

equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:

- that project is part of a *larger common plan of development or sale*; or
- if controlling such activities in a particular watershed is required by the *Department*;

iii. includes a law, ordinance or other regulatory mechanism to require post construction runoff controls from new development and re-development projects to the extent allowable under *State* law that meet the *State*'s most current technical standards:

- the mechanism must be equivalent to one of the versions of the" NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control"; and
- equivalence must be documented
  -by adoption of one of the sample local laws without changes;
  - by using the NYSDEC Gap Analysis Workbook; or
  - by adoption of a modified version of the sample law, or an alternative law, and, in either scenario and certification by the attorney representing the small MS4 that the adopted law is equivalent to one of the sample local laws;

iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider principles of *Low Impact Development* (LID), *Better Site Design* (BSD), and other *Green Infrastructure* practices to the MEP. In the development of the watershed plans, municipal comprehensive plans, open space preservation programs, local law, ordinances and land use regulations, covered entities must consider smart growth principles, natural resource protection, impervious area reduction, maintaining natural hydrologic conditions in developments, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils.

- *covered entities* are required to review according to the *Green Infrastructure* practices defined in the Design Manual at a site level, and are encouraged to review, and revise where appropriate, local codes and laws that include provisions that preclude green infrastructure or construction techniques that minimize or reduce pollutant loadings.

(Part VII.A.5.a.iv.)

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for post-construction *stormwater* discharged by the practice;

v. describes procedures for *SWPPP* review with consideration of potential water quality impacts and review of individual *SWPPP*s to ensure consistency with state and local post-construction *stormwater* requirements;
   - ensure that the individuals performing the reviews are adequately trained and understand the *State* and local post construction *stormwater* requirements;
   - ensure that the individuals performing the reviews for SWPPPs that include post-construction stormwater management practices are *qualified professionals* or under the supervision of a *qualified professional*;
   - all *SWPPP*s must be reviewed for sites where the disturbance is one acre or greater;
   - after review of *SWPPPs*, the *covered entity* must utilize the "MS4 SWPPP Acceptance Form" created by the *Department* and required by the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001) when notifying construction site owner / operators that their plans have been accepted by the *covered entity*;

   - utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the *Department* to educate municipal boards and Planning and Zoning Boards on low impact development principles, better site design approach, and green infrastructure applications.

vi. maintain an inventory of post-construction stormwater management practices within the *covered entities* jurisdiction. At a minimum, include practices discharging to the *small MS4* that have been installed since March 10, 2003, all practices owned by the *small MS4*, and those practices found to cause or contribute to water quality standard violations.
   - the inventory shall include at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and

(Part VII.A.5.a.)

vii. ensures adequate long-term operation and maintenance of management practices identified in Part VII.5.a.vi by trained staff, including inspection to ensure that practices are performing properly.
- The inspection shall include inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;

viii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:
- Ensure that offset exceeds a standard reduction by factor of at least 2
- Offset is implemented within the same watershed
- Proposed offset addresses the POC of the watershed
- Tracking system is established for the watershed
- Mitigation is applied for retrofit or redevelopment
- Offset project is completed prior to beginning of the proposed construction
- A legal mechanism is established to implement the banking and credit system

b. *Develop (for newly authorized MS4s)*, *implement*, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators;

c. *Develop (for newly authorized MS4s)*, record, annually assess and modify as needed *measurable goals*; and

d. Select and implement appropriate post-construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

(Part VII.A.5.)

Required SWMP Reporting

e. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

   i. number of *SWPPPs* reviewed;
   ii. number and type of enforcement actions;
   iii. number and type of post-construction stormwater management practices inventoried;
   iv. number and type of post-construction stormwater management practices inspected;
   v. number and type of post-construction stormwater management practices maintained;
   vi. regulatory mechanism status - certification that regulatory mechanism is equivalent to one of the "NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control" (if not already done); and
   vii. report on effectiveness of program, BMP and measurable goal assessment, and implementation of a banking and credit system, if applicable;

f. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

   i. **program *development* deadlines and reporting**:
   Initiate by end of Year 1; complete by end of Year 3:
   - regulatory mechanism development and adoption status - by end of Year 3 certify that regulatory mechanism is equivalent to one of the NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control (if not already completed and submitted with an earlier report);

   Initiate by end of Year 2; complete by end of Year 3:
   - procedures for SWPPP review to ensure that post-construction stormwater management practices meet the most current version of the state technical standards;
   - procedures for inspection and maintenance of post-construction management practices;
   - procedures for enforcement and penalization of violators; and

   Complete by the end of year 3:

(Part VII.A.5.f.i.)

- provide resources for the program to inspect new and re-development sites and for the enforcement and penalization of violators.

ii. **program *implementation* reporting** as set forth in Part VII.A.5(e) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

6. Pollution Prevention/Good Housekeeping For Municipal Operations - SWMP Development / Implementation

At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)* and *implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:

i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification; or other;

ii. at a minimum frequency of once every three years, perform and document a self assessment of all municipal operations addressed by the SWMP to:
- determine the sources of pollutants potentially generated by the *covered entity*'s operations and facilities; and
- identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;

iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential) pollutants. Refer to management practices identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" and other guidance materials available from the EPA, *State,* or other organizations;

iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity*'s capabilities;

(Part VII.A.6.a.)

v. addresses pollution prevention and good housekeeping priorities;

vi. includes an employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize training;

vii. requires third party entities performing contracted services, including but not limited to street sweeping, snow removal, lawn / grounds care, etc., to meet permit requirements as the requirements apply to the activity performed ; and

viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multi-sector General Permit (MSGP, GP-0-06-002) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to the MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* of the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;

b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of existing islands in parking lots with rain gardens, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

c. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed measurable goals; and

d. Select and implement appropriate pollution prevention and good housekeeping *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

f. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on

(Part VII.A.6.f.)

all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity's* pollution prevention and good housekeeping program addressed during the reporting year:

   – acres of parking lot swept;
   – miles of street swept;
   – number of catch basins inspected and, where necessary, cleaned;
   – post-construction control stormwater management practices inspected and, where necessary, cleaned;
   – pounds of phosphorus applied in chemical fertilizer
   – pounds of nitrogen applied in chemical fertilizer; and
   – acres of pesticides / herbicides applied.

iii. staff training events and number of staff trained; and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. **program *development* deadlines and reporting** (first three years after authorization is granted):
   Complete by end of Year 1:
   - identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
   - describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);

(Part VII.A.6.g.i.)

- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by end of Year 2; complete by end of Year 3:

- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained; and

Complete by end of Year 3:

- description of developed management practices.

ii. **program *implementation* reporting** as set forth in Part VII.A.6.(d) above. Commence reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during development period.

PART VIII. MINIMUM CONTROL MEASURES - TRADITIONAL NON-LAND USE CONTROL AND NON-TRADITIONAL MS4s

A. Traditional Non-Land Use Control and Non-traditional MS4 Minimum Control Measures (MCMs)

These MCMs apply to *traditional non-land use control MS4s* and *non-traditional MS4s*. The SWMP for these *small MS4s* must be comprised of the 6 MCMs below. It is recommended that covered entities refer to assistance and guidance documents available from the *State* and EPA.

Under this *SPDES general permit*, the continuing *covered entities* are required to implement their SWMP, including the MCM requirements below. Newly regulated covered entities are required to develop their SWMP, containing the MCM requirements below, within the first 3 years of coverage and then commence implementation.

The *covered entity* may *develop (for newly authorized MS4s)* and / or *implement* their *SWMP* within their jursidiction on their own. The *covered entity* may also *develop (for newly authorized MS4s)* and / or *implement* part or all of their *SWMP* through an intermunicipal program with another *covered entity*(s) or through other cooperative or contractual agreements with third parties that provide services to the *covered entity(s)*.

For each of the elements of the SWMP plan, the *covered entity* must identify (i) the agencies and/or offices that would be responsible for implementing the SWMP plan element and (ii) any protocols for coordination among such agencies and/or offices necessary for the implementation of the plan element.

To comply with the requirements of this *SPDES general permit*, the *traditional non-land use control MS4s* and *non-traditional MS4s* should consider their public to be the employee / user population, visitors, or contractors / developers. Examples of the public include, but are not limited to:

- transportation *covered entities* - general public using or living along transportation systems, staff, contractors;
- educational *covered entities* - faculty, other staff, students, visitors;
- other government *covered entities* - staff, contractors, visitors.

1. Public Education and Outreach on Stormwater Impacts SWMP Development / Implementation

At a minimum, all *covered entities* must:

a. Identify *POC*s, waterbodies of concern, geographic areas of concern, target audiences;

(Part VIII.A.1.)

b. *Develop (for newly authorized MS4s)* and *implement* an ongoing public education and outreach program designed to describe:
   i. the impacts of *stormwater discharges* on waterbodies;
   ii. *POCs* and their sources;
   iii. steps that contributors of these pollutants can take to reduce pollutants in *stormwater* runoff; and
   iv. steps that contributors of non-*stormwater discharges* can take to reduce pollutants (non-*stormwater discharges* are listed in Part I.A.2);

c. Educational materials may be made available at, locations including, but not limited to:
   i. at service areas, lobbies, or other locations where information is made available;
   ii. at staff training;
   iii. on *covered entity's* website;
   iv. with pay checks; and
   v. in employee break rooms;

d. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

e. Select and implement appropriate education and outreach *activities* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

f. At a minimum, the *covered entity* shall report on the items below:

   i. list education / outreach *activities* performed and provide any results (number of people attended, amount of materials distributed, etc.);
   ii. education of the public about the hazards associated with illegal *discharges* and improper disposal of waste as required by Part VIII.A.3, may be reported in this section;
   iii. *covered entity's* performing the education and outreach activities required by other MCMs (listed below), may report on those activities in MCM 1 and provide the following information applicable to their program:
      - IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
      - construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
      - employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6;

      To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the

(Part VIII.A.1.f.iii.)

associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by;

iv. report on effectiveness of program, *BMP* and *measurable goal* assessment; and

v. maintain records of all training activities

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Complete in Year 1 (report changes in Year 2 and 3 as needed):
- list (and describe if necessary) POCs;
- *development* of education and outreach program and activities for the public that address *POCs*, geographic areas of concern, and / or *discharges* to *303(d)* / *TMDL* waterbodies;
- *covered entities* developing education and outreach programs required by other MCMs (listed below), may report on development (and implementation of
those activities, if occurring during the three year development period) in MCM 1 and provide the following information applicable to their program:
  - IDDE education *activities* planned or completed for the public, as required by Part VIII.A.3;
  - construction site *stormwater* control training planned or completed, as required by Part VIII.A.4; and
  - employee pollution prevention / good housekeeping training planned or completed, as required by Part VIII.A.6.

To facilitate shared annual reporting, if the education and outreach activities above are implemented by a third party, and the third party is completing the associated portions of the annual report, that third party may report on the education and outreach activities within MCM 1 of the annual report and not within the MCMs that the education and outreach activities are required by.

ii. **Program *implementation* reporting** as set forth in Part VIII.A.1(f) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

2. Public Involvement/Participation - **SWMP Development / Implementation**
At a minimum, all *covered entities* must:

(Part VIII.A.2.)

a. Comply with *State* and local public notice requirements identified below when implementing a public involvement / participation program:
   i. *traditional non-land use control MS4s* shall comply with the *State Open Meetings Law* and local public notice requirements, such as *Open Meetings Law*; and

   ii. *traditional non-land use control MS4s* and *non-traditional MS4s* may comply with this requirement by determining who their public is (staff, visitors, contractors, etc.) and posting notifications (as needed) in areas viewable by the public. Such areas include common areas, bulletin boards, agency/office web pages, etc. For *small MS4s* whose public are in multiple locations, notifications shall be made available to the public in all locations within the urbanized or additionally designated areas;

b. Provide the opportunity for the public to participate in the *development*, *implementation,* review, and revision of the *SWMP*;

c. **Local stormwater public contact.**
   Identify a local point of contact for public concerns regarding *stormwater* management and compliance with this *SPDES general permit*. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the *Department* on the MCC form;

d. **Annual report presentation.**
   Below are the requirements for the annual report presentation:

   i. prior to submitting the final annual report to the *Department*, by June 1 of each reporting year (see Part V.C.), present the draft annual report in a format that is open to the public, where the public can ask questions and make comments on the report. This can be done:
      - at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report. This may be a regular meeting of an existing board. It may also be a separate meeting, specifically for *stormwater*. If multiple *covered entities* are working together, they may have a group meeting (refer to Part V.C.2); or
      - on the internet by:
        - making the annual report available to the public on a website:
        - providing the public the opportunity to provide comments on the internet or otherwise; and

(Part VIII.A.2.d.i.)

- making available the opportunity for the public to request an open public meeting to ask questions about and make comments on the report;

ii. *traditional non-land use control MS4s* must comply with Part VIII.A.2.(d)(i) above. If they choose to present the draft annual report at a meeting, it may be presented at an existing meeting (e.g. a meeting of the Environmental Management Council , Water Quality Coordinating Committee, other agencies, or a meeting specifically for stormwater), or made available for review on the internet. The *covered entity* must make public the following information when noticing the presentation in accordance with *Open Meetings Law* or other local public notice requirements:
   - the placement of the annual report on the agenda of this meeting or location on the internet;
   - the opportunity for public comment. This *SPDES general permit* does not require a specified time frame for public comments, although it is recommended that *covered entities* provide the public an opportunity to comment for a period after the meeting. Comments received after the final annual report is submitted shall be reported with the following year's annual report. *Covered entities* must take into account those comments in the following year;
   - the date and time of the meeting or date annual report becomes available on the internet; and
   - the availability of the draft report for review prior to the public meeting or duration of availability of the annual report on the internet;

iii. *non-traditional MS4s* typically do not have regular meetings during which a presentation on the annual report can be made. Those *covered entities* may comply with this requirement by either:
   - noticing the availability of the report for public comment by posting a sign, posting on web site, or other methods with information about the availability and location where the public can view it and contact information for those that read the report to submit comments; or
   - following the internet presentation as explained in Part VIII.A.2(d)(i) above;

iv. the *Department* recommends that announcements be sent directly to individuals (public and private interested parties) known to have a specific interest in the covered entity's *SWMP*;

(Part VIII.A.2.d.)

v. include a summary of comments and intended responses with the final annual report. Changes made to the *SWMP* in response to comments should be described in the annual report; and

vi. ensure that a copy of the final report and, beginning in 2009, the SWMP plan are available for public inspection;

e. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

f. Select and implement appropriate public involvement / participation *activities* and *measurable goals* to ensure the reduction of all of the *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

g. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
   i. annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
   ii. comments received and intended responses (as an attachment); and
   iii. report on effectiveness of program, *BMP* and *measurable goal* assessment;

h. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
   i. **program *development* deadlines and reporting**:
   Complete for Year 1, 2, and 3:
      - annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment; and
      - comments received and intended responses (as an attachment).

   ii. **program *implementation* reporting** as set forth in Part VIII.A.2.g above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

3. Illicit Discharge Detection and Elimination (IDDE) - SWMP Development / Implementation

At a minimum, all *covered entities* must:

(Part VIII.A.3.)

a. *Develop (for newly authorized MS4s)*, *implement* and enforce a program to detect and eliminate *illicit discharges* (as defined at 40CFR 122.26(b)(2)) into the *small MS4;*

b. *Develop (for newly authorized MS4s)* and maintain a map, at a minimum within the *covered entity's* jurisdiction in the *urbanized area and additionally designated area*, showing:

   i. the location of all *outfalls* and the names and location of all *surface waters of the State* that receive *discharges* from those *outfalls*;
   ii. by March 9, 2010, the preliminary boundaries of the *covered entity's storm sewersheds* determined using GIS or other tools, even if they extend outside of the *urbanized area* (to facilitate trackdown), and *additionally designated* area within the *covered entity's* jurisdiction; and
   iii. when grant funds are made available or for sewer lines surveyed during an illicit discharge trackdown, the *covered entity's* storm sewer system in accordance with available *State* and EPA guidance;

c. Field verify *outfall* locations;

d. Conduct an outfall reconnaissance inventory, as described in the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, addressing every *outfall* within the *urbanized area* and *additionally designated area* within the *covered entity's* jurisdiction at least once every five years, with reasonable progress each year;

e. Map new *outfalls* as they are constructed or discovered within the *urbanized area* or *additionally designated* area;

f. Prohibit *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions below, as applicable:

   i. for *traditional non-land use control MS4s*:
      - effectively prohibit, through a law, ordinance, or other regulatory mechanism, *illicit discharges* into the *small MS4* and *implement* appropriate enforcement procedures and actions; and
      - the law, ordinance, or other regulatory mechanism must be equivalent to the *State*'s model *IDDE* local law "NYSDEC Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems" developed by the *State*, as determined and certified to be equivalent by the attorney representing the *small MS4* ; and

(Part VIII.A.3.f.)

ii. for *non-traditional MS4s*:
- prohibit and enforce against *illicit discharges* through available mechanisms (ie. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
- procedures or policies must be developed for implementation and enforcement of the mechanisms;
- a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for the *covered entity's IDDE* program; and
- the mechanisms and directive must be equivalent to the *State*'s model illicit discharge local law;

g. *Develop (for newly authorized MS4s)* and *implement* a program to detect and address non-stormwater *discharges*, including illegal dumping, to the *small MS4* . The program must include: procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program; description of priority areas of concern, available equipment, staff,
funding, etc.; procedures for identifying and locating *illicit discharges* (trackdown); procedures for eliminating *illicit discharges*; and procedures for documenting actions;

h. Inform the public of the hazards associated with illegal *discharges* and the improper disposal of waste;

i. Address the categories of non-stormwater *discharges* or flows listed in Part I.A.2 as necessary and maintain records of notification;

j. *Develop (for newly authorized MS4s)*, record, periodically assess, and modify as needed, *measurable goals;* and

k. Select and implement appropriate IDDE *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*

Required SWMP Reporting

l. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and percent of *outfalls* mapped;

(Part VIII.A.3.l.)

ii. number of *illicit discharges* detected and eliminated;
iii. percent of outfalls for which an outfall reconnaissance inventory has been performed. ;
iv. status of system mapping;
v. activities to and results from informing the public of hazards associated with illegal *discharges* and improper disposal of waste;
vi. for traditional non-land use control MS4s, regulatory mechanism status - certification that law is equivalent to the *State*'s model *IDDE* local law (if not already completed and submitted with a prior annual report); and
vii. report on effectiveness of program, *BMP* and *measurable goal* assessment.

m. Required reporting for **newly authorized *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. **program *development* deadlines and reporting**:
Initiate by end of Year 1; complete by end of Year 3:
- regulatory mechanism development and adoption - by end of Year 3 certify that regulatory mechanism is equivalent to the *State's* model *IDDE* local law (traditional non-land use control MS4s) or certification of equivalence may be accomplished as set forth in Part VIII.A.3(f)(ii).

Complete in Year 1 (revise in Year 2 and 3 if changes are made):
- describe procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program;
- describe priority areas of concern, available equipment, staff, funding, etc.;

Initiate by end of Year 1; complete by end of Year 2 (revise in Year 3 if changes are made):
- describe procedures for identifying and locating *illicit discharges* (trackdown);
- describe procedures for eliminating *illicit discharges*;
- describe procedures for enforcing against illicit dischargers;
- describe procedures for documenting actions;
- describe the program being developed for informing the public of hazards associated with illegal *discharges* and improper disposal of waste;

Initiate by end of Year 2; complete by end of Year 3:
- number and percent of *outfalls* mapped;

(Part VIII.A.3.m.i.)

Complete by Year 3:
- *outfall* map; and

ii. **program *implementatio*n reporting** as set forth in Part VIII.A.3(l) above. Commence *implementation* reporting after three year *development* period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

4. Construction Site Stormwater Runoff Control - **SWMP Development / Implementation**
At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:

i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit* ;

ii. addresses *stormwater* runoff to the *small MS4* from *construction activities* that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from *construction activity* disturbing less than one acre must be included in the program if:
- that *construction activity* is part of a *larger common plan of development or sale* that would disturb one acre or more; or
- if controlling such activities in a particular watershed is required by the *Department;*

iii. incorporates mechanisms for construction runoff requirements from new development and redevelopment projects to the extent allowable under *State* and local law that meet the *State*'s most current technical standards:
- through available mechanisms (ie. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
- procedures or policies must be developed for implementation and enforcement of the mechanisms;
- a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned, under easement to, within the

(Part VIII.A.4.a.iii.)

right-of-way of, or under the maintenance jurisdiction by the *covered entity* or within the maintenance jurisdiction of the MS4; and
- the mechanisms and directive must be equivalent to the to the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities.

iv. allows for sanctions to ensure compliance to the extent allowable by *State* law;

v. describes procedures for receipt and follow up on complaints or other information submitted by the public regarding construction site stormwater runoff;

vi. educates construction site operators, design engineers, *municipal* staff and other individuals to whom these regulations apply about the construction requirements in the *covered entity's* jurisdiction, including the procedures for submission of *SWPPPs*, construction site inspections, and other procedures associated with control of construction stormwater;

vii. Ensures that construction site contractors have received erosion and sediment control training, including the *trained contractors* as defined in the SPDES general permit for construction, before they do work within the *covered entity's* jurisdiction:
- training may be provided by the *Department* or other qualified entities (such as Soil and Water Conservation Districts);
- the *covered entity* is not expected to perform such training, but they may co-sponsor training for construction site operators in their area;
- the *covered entity* may ask for a certificate of completion or other such proof of training; and
- the *covered entity* may provide notice of upcoming sediment and erosion control training by posting in the building department or distribute with building permit application.

viii. establishes and maintains an inventory of active construction sites, including the location of the site, owner / operator contact information;

ix. develop *(for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals*; and

(Part VIII.A.4.a.)

x. select and implement appropriate construction stormwater *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

b. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
   i. number and type of sanctions employed;
   ii. status of regulatory mechanism - certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;
   iii. number of construction sites authorized for disturbances of one acre or more; and
   iv. report on effectiveness of program, *BMP* and *measurable goal* assessment.

c. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:
   i. **Program *development* deadlines and reporting**:
   Initiate by end of Year 1:
   - procedures, activities and identify personnel to educate and train construction site operators about requirements to develop and implement a SWPPP and any other requirements that must be met within the MS4's jurisdiction;

   Initiate by the end of Year 1; complete by the end of Year 3:
   - status of mechanism for construction runoff requirements - by end of Year 3 certify that mechanisms will assure compliance with the NYS SPDES General Permit for Stormwater Discharges from Construction Activities; and

   Complete in Year 1 (revise in Year 2 and 3 if changes are made):
   - describe procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel.

   ii. Program implementation reporting as set forth in Part VIII.A.4(b) above. Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during development period.

(Part VIII.A.)

5. **Post-Construction Stormwater Management SWMP Development / Implementation**
   At a minimum, all *covered entities* must:
   a. *Develop (for newly authorized MS4s)*, *implement*, and enforce a program that:
      i. provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities, unless more stringent requirements are contained within this *SPDES general permit*;

      ii. addresses *stormwater* runoff from new development and redevelopment projects to the *small MS4* from projects that result in a land disturbance of greater than or equal to one acre. Control of *stormwater discharges* from projects of less than one acre must be included in the program if:
         - that project is part of a *larger common plan of development or sale*;
         - if controlling such activities in a particular watershed is required by the *Department*;

      iii. incorporates enforceable mechanisms for post-construction runoff control from new development and re-development projects to the extent allowable under *State* or local law that meet the *State*'s most current technical standards:
         - through available mechanisms (i.e. tenant lease agreements, bid specifications, requests for proposals, standard contract provisions, connection permits, maintenance directives / BMPS, access permits, consultant agreements, internal policies);
         - procedures or policies must be developed for implementation and enforcement of the mechanisms;
         - a written directive from the person authorized to sign the NOI stating that updated mechanisms must be used and who (position(s)) is responsible for ensuring compliance with and enforcing the mechanisms for construction projects that occur on property owned by the *covered entity* or within the maintenance jurisdiction of the MS4; and
         - the mechanisms and directive must assure compliance with the requirements of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities;

      iv. includes a combination of structural or non-structural management practices (according to standards defined in the most current version of the NYS Stormwater management Design Manual) that will reduce the *discharge* of pollutants to the MEP. In the development of environmental plans such as watershed plans, open space preservation programs, local laws, and ordinances covered entities must incorporate principles of *Low Impact Development* (LID), *Better Site Design* (BSD) and other *Green Infrastructure* practices to the MEP.

(Part VIII.A.5.a.iv.)

Covered entities must consider natural resource protection, impervious area reduction, maintaining natural hydrologic condition in developments, buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands, and erodible soils in the development of environmental plans.

- if a *stormwater* management practice is designed and installed in accordance with the New York State Stormwater Management Design Manual or has been demonstrated to be equivalent and is properly operated and maintained, then *MEP* will be assumed to be met for the post construction *stormwater* discharged by the practice;

v. establish and maintain an inventory of post-construction stormwater management practices to include at a minimum practices discharging to the *small MS4* that have been installed since March 10, 2003, those owned by the small MS4, and those found to cause water quality standard violations.
   - the inventory shall include, at a minimum: location of practice (street address or coordinates); type of practice; maintenance needed per the NYS Stormwater Management Design Manual, *SWPPP*, or other provided documentation; and dates and type of maintenance performed; and

vi. ensures adequate long-term operation and maintenance of management practices by trained staff, including assessment to ensure that the practices are performing properly.
   - The assessment shall include the inspection items identified in the maintenance requirements (NYS Stormwater Management Design Manual, *SWPPP*, or other maintenance information) for the practice. *Covered entities* are not required to collect *stormwater* samples and perform specific chemical analysis;

vii. Covered entities may include in the SWMP Plan provisions for development of a banking and credit system. MS4s must have an existing watershed plan based on which offsite alternative stormwater management in lieu of or in addition to on-site stormwater management practices are evaluated. Redevelopment projects must be evaluated for pollutant reduction greater than required treatment by the state standards. The individual project must be reviewed and approved by the *Department*. Use of a banking and credit system for new development is only acceptable in the impaired watersheds to achieve the no net increase requirement and watershed improvement strategy areas to achieve pollutant reductions in accordance with watershed plan load reduction goals. A banking and credit system must at minimum include:

(Part VIII.A.5.a.vii.)

- Ensures offset exceeds standard reduction by factor of at least 2
- Offset is implemented within the same watershed
- Proposed offset addresses the POC of the watershed
- Tracking system is established for the watershed
- Mitigation is applied for retrofit or redevelopment
- Offset project is completed prior to beginning the proposed construction
- A legal mechanism is established to implement the banking and credit system

b. *Develop (for newly authorized MS4s)*, *implement*, and provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and employ sanctions;

c. *Develop (for newly authorized MS4s)*, record, annually assess and modify as needed *measurable goals*; and

d. Select and implement appropriate post-construction *stormwater BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

Required SWMP Reporting

e. Program *implementation* reporting for continuing *covered entities* (MS4s covered for 3 or more years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

i. number and type of sanctions;
ii. number and type of post-construction stormwater management practices;
iii. number and type of post-construction stormwater management practices inspected;
iv. number and type of post-construction stormwater management practices maintained;
v. status of regulatory mechanism, equivalent mechanism,that regulatory mechanism is equivalent ; and
vi. report on effectiveness of program, *BMP* and *measurable goal* assessment, and implementation of a banking and credit system, if applicable.

f. Program reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). At a minimum, the *covered entity* shall report on the items below:

(Part VIII.A.5.f.)

i. **program *development* deadlines and reporting**:

Initiate by end of Year 1; complete by end of Year 3:

- mechanism of post-construction stormwater management - by end of Year 3 certify that mechanisms will assure compliance with the NYS Construction General Permit (GP-0-10-001);

Initiate by end of Year 2; complete by end of Year 3:

- procedures for inspection and maintenance of post-construction management practices; and
- procedures for enforcement and penalization of violators;

ii. **program *implementation* reporting** as set forth in Part VIII.A.5(e). Commence *implementation* reporting after three year development period. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

6. Pollution Prevention/Good Housekeeping For Municipal Operations

SWMP Development / Implementation

At a minimum, all *covered entities* must:

a. *Develop (for newly authorized MS4s)* and *implement* a pollution prevention / good housekeeping program for *municipal* operations and facilities that:

i. addresses *municipal* operations and facilities that contribute or potentially contribute *POCs* to the *small MS4* system. The operations and facilities may include, but are not limited to: street and bridge maintenance; winter road maintenance; stormwater system maintenance; vehicle and fleet maintenance; park and open space maintenance; municipal building maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; hydrologic habitat modification, or other;

ii. includes the performance and documentation of a self assessment of all municipal operations to:

- determine the sources of pollutants potentially generated by the *covered entity*'s operations and facilities; and
- identify the *municipal* operations and facilities that will be addressed by the pollution prevention and good housekeeping program, if it is not done already;

iii. determines *management practices*, policies, procedures, etc. that will be *developed* and *implemented* to reduce or prevent the discharge of (potential)

(Part VIII.A.6.a.iii.)

pollutants. Refer to *management practices* identified in the "NYS Pollution Prevention and Good Housekeeping Assistance Document" or other guidance materials available from the EPA, the *State,* or other organizations;

iv. prioritizes pollution prevention and good housekeeping efforts based on geographic area, potential to improve water quality, facilities or operations most in need of modification or improvement, and *covered entity*'s capabilities;

v. addresses pollution prevention and good housekeeping priorities;

vi. includes an employee pollution prevention and good housekeeping training program and ensure that staff receive and utilize training;

vii. requires third party entities performing contracted services, including but not limited to, street sweeping, snow removal, lawn / grounds care, etc., to make the necessary certification in Part IV.G; and

viii. requires *municipal* operations and facilities that would otherwise be subject to the NYS Multisector General Permit (MSGP, GP-0-06-002) for industrial stormwater discharges to prepare and *implement* provisions in the SWMP that comply with Parts III. A, C, D, J, K and L of the MSGP. The covered entity must also perform monitoring and record keeping in accordance with Part IV. of the MSGP. Discharge monitoring reports must be attached to MS4 annual report. Those operations or facilities are not required to gain coverage under the MSGP. *Implementation* the above noted provisions of the SWMP will ensure that MEP is met for discharges from those facilities;

b. Consider and incorporate cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal properties to the MEP. Some examples include replacement of closed drainage with grass swales, replacement of the existing islands in parking lots with rain garden, or curb cuts to route the flow through below grade infiltration areas or other low cost improvements that provide runoff treatment or reduction.

c. *Develop (for newly authorized MS4s)*, record, periodically assess and modify as needed *measurable goals* ; and

(Part VIII.A.6.)

d. Select and implement appropriate pollution prevention and good housekeeping *BMPs* and *measurable goals* to ensure the reduction of all *POCs* in *stormwater discharges* to the *MEP*.

e. Adopt techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface water.

Required SWMP Reporting

f. **Program *implementation* reporting** for **continuing *covered entities*** (MS4s covered for 3 or more years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally designated area*) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. indicate the *municipal* operations and facilities that the pollution prevention and good housekeeping program assessed;
ii. describe, if not done so already, the management practices, policies and procedures that have been developed, modified, and / or implemented and report, at a minimum, on the items below that the *covered entity's* pollution prevention and good housekeeping program addresses during the reporting year:

- acres of parking lot swept;
- miles of street swept;
- number of catch basins inspected and, where necessary, cleaned;
- post-construction control stormwater management practices inspected and, where necessary, cleaned;
- pounds of phosphorus applied in chemical fertilizer
- pounds of nitrogen applied in chemical fertilizer; and
- acres of pesticides / herbicides applied.

iii. staff training events and number of staff trained; and
iv. report on effectiveness of program, *BMP* and *measurable goal* assessment. If the pollution prevention and good housekeeping program addresses other operations than what is listed above in Part VIII.A.6.a(ii), the *covered entity* shall report on items that will demonstrate program effectiveness.

g. Reporting for **newly regulated *covered entities*** (MS4s covered for less than 3 years on the *reporting date*). *Covered entities* are required to report on all *municipal* operations and facilities within their jurisdiction (*urbanized area* and *additionally*

(Part VIII.A.6.g.)

designated area) that their program is addressing. The *covered entity* shall report at a minimum on the items below:

i. **program *development* deadlines and reporting**:

Complete by end of Year 1:

- identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program;
- describe the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement);
- describe management practices, policies, procedures, etc. that will be developed or modified;
- identify the staff and equipment available;

Initiate by Year 2; complete Year 3:

- describe employee pollution prevention and good housekeeping program training program and begin training, report on number of staff trained;

Complete by end of Year 3:

- description of developed management practices.

ii. **program *implementation* reporting** as set forth in Part VIII.A.6(d) above. Commence *implementation* reporting after three year *development* permit. *Implementation* reporting may begin earlier if *implementation* begins during *development* period.

Part IX. WATERSHED IMPROVEMENT STRATEGY REQUIREMENTS

The covered entities in the watershed improvement strategy areas must develop or modify their SWMP to address the watershed specific additional requirements to achieve the pollutant load reduction by the deadline as defined in the Tables in Part IX of this general SPDES permit. The Pollutant Load Reductions are the reductions necessary from the discharge loads associated with MS4s that, when combined with reductions in the discharge loads from non-MS4s to the waterbody, will meet water quality standards. The calculated reductions are based on TMDL models and may be recalculated according to 40CFR Part 130.

The MS4 portion of the pollutant load reduction shall be achieved by implementation of BMPs required of all MS4s, reductions from implementation of additional BMPS for watershed improvement strategy areas including any retrofits required by this permit. These reductions are intended to be targeted and credited using models, loading factors and load reductions predicted based on the best scientific information available.

The Pollutant Load Reduction Deadlines are deadlines by which the MS4 portion of the pollutant load reduction must be met. Watershed Improvement Strategy Deadlines are the deadlines by which the watershed improvement strategy requirements for addressing the POC are to be completed and implemented. Retrofit Plan Submission Deadlines are the deadlines by which the retrofit plan component of the watershed improvement strategies are submitted to the *Department* for review and approval.

Ultimately, the effectiveness of the load reductions in meeting water quality standards will be verified by ambient monitoring of the affected waterbody. Where ambient monitoring demonstrates consistent compliance with water quality standards, the covered entity may request that the *Department* suspend the additional BMP requirements to install stormwater retrofits.

(Part IX.)

A. New York City East of Hudson Watershed MS4s - (Mapped in Appendix 3)

Table IX.A - Pollutant Load Reduction and Timetable for New York City East of Hudson Phosphorus Watershed Improvement Strategy Area

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Load Allocation)	Pollutant Load Reduction Deadline
New York City East of Hudson Watershed	05/01/2011	03/09/ 2009 (single) and 12/ 31/2009 (RSE)	In accordance with the TMDL Implementation Plan	03/09/2019 (single) 12/31/2019 (RSE)

By the deadline defined in the Table IX. A, covered entities in these watersheds shall, in addition to the requirements in Part VII or VIII, depending on the type of the MS4, develop and implement the following minimum control measures for areas within their jurisdiction and their storm sewersheds:

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of phosphorus (the *POC*) on waterbodies. The program must identify potential sources of phosphorus in *stormwater* runoff and describe steps that contributors can take to reduce the concentration of this *POC* in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater* discharges (Part I.A.2) can take to reduce phosphorus.

b. Develop, or acquire if currently available, specific educational material dealing with sources of phosphorus in *stormwater* and pollutant reduction practices. At a minimum, the educational material should address the following topics:

i. understanding the phosphorus issue;

ii. septic systems as a source of phosphorus;

iii. phosphorus concerns with fertilizer use;

iv. phosphorus concerns with grass clippings and leaves entering streets and storm sewers;

v. construction sites as a source of phosphorus; and

(Part IX.A.1.b.)

vi. phosphorus concerns with detergent use.

2. Public Involvement/ Participation

No additional requirements proposed for this permit term.

3. Illicit Discharge Detection and Elimination

a. Mapping - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and maintain a map showing the entire *small MS4* conveyance system. The *covered entity* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by January 8, 2013.

At a minimum, the map and/or supportive documentation for the conveyance system should include the following information:

i. type of conveyance system - closed pipe or open drainage;

ii. for closed pipe systems - pipe material, shape, and size;

iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;

iv. drop inlet, catch basin, and manhole locations; and

v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24,000 or better.

b. On-site wastewater systems - applicable to *traditional land use control* and *traditional non-land use control MS4s*.

- *Develop*, *implement* and enforce a program that ensures that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated. Regular field investigations/inspections should be done in accordance with the most current

version of the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control- applicable to *traditional land use control MS4s*.

a. *Develop*, *implement* and enforce a program to reduce pollutants in *stormwater* runoff to the *small MS4* from construction activities that result in a land disturbance of greater than or equal to five thousand (5000) square feet. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the development and implementation of:

   i. by December 31, 2009, an ordinance or other regulatory mechanism that requires erosion and sediment controls designed in accordance with the most current version of the technical standard New York State Standards and Specifications for Erosion and Sediment Control for all construction activities that disturb between five thousand (5000) square feet and one acre of land. For construction activities that disturb between five thousand (5000) square feet and one (1) acre of land, one of the standard erosion and sediment control plans included in Appendix E (Erosion & Sediment Control Plan For Small Homesite Construction) of the New York Standards and Specifications for Erosion and Sediment Control may be used as the Stormwater Pollution Prevention Plan (SWPPP);

   ii. policy and procedures for the *covered entity* to perform, or cause to be performed, compliance inspections at all sites with a disturbance of one (1) or more acres. By December 31, 2009, the *covered entity* shall have started performing, or cause to be performed, compliance inspections at all sites with a disturbance between five thousand (5000) square feet and one (1) acre of land;

5. Post-Construction Stormwater Management

a. Construction stormwater program - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

(Part IX.A.5.a.)

Develop, *implement* and enforce a program to address post-construction *stormwater* runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre. This includes projects of less than one acre that are part of a larger common plan of development or sale. At a minimum, the program must provide equivalent protection to the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity and must include the *development* and *implementation* of:

i. a law or other mechanism that requires post-construction stormwater management controls designed in accordance with the most current version of the technical standards the New York State Stormwater Management Design Manual including the Enhanced Phosphorus Removal Design Standards. An MS4 must ensure that their ordinance or other mechanism requires post-construction stormwater management controls to be designed in accordance with the final version of the Enhanced Phosphorus Removal Design Standards by September 30, 2008 .

b. Retrofit program - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant phosphorus. At a minimum, the MS4 shall:

i. establish procedures to identify sites with erosion and/or pollutant loading problems;

ii. establish policy and procedures for project selection. Project selection should be based on the phosphorus reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

iii. establish policy and procedures for project permitting, design, funding, construction and maintenance.

(Part IX.A.5.b.)

iv. for covered entities that develop their own retrofit program, by March 9, 2009 develop and submit approvable plans with schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those schedules, the plans and schedules shall become enforceable requirements of this permit.

v. pursuant to Part IV. B (Cooperation Between Covered entities Encouraged), retrofit projects can be completed in cooperation with other covered entities in the East of Hudson Watershed through the formation of a cooperative entity with other MS4s. Participating MS4s shall work with the Department and other members of the cooperative entity in implementing the requirements of i, ii and iii above. In addition, each covered entity that becomes a member of the cooperative entity shall work closely with the Department and other members of the cooperative entity to, by December 31, 2009, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations- applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

a. By December 31, 2009, develop and implement a Stormwater Conveyance System inspection and maintenance program. At a minimum, the program shall include the following:

i. policy and procedures for the inspection and maintenance of catch basin and manhole sumps. Catch basin and manhole sumps should be inspected in the early spring and late fall for sediment and debris build-up. If sediment and debris fills greater than 50% of the sump volume, the sump should be cleaned. All sediment and debris removed from the catch basins and manholes shall be properly disposed of;

ii. policy and procedures for the inspection, maintenance and repair of conveyance system *outfalls*. Beginning June 30, 2008, the MS4 must inspect 20% of their *outfalls* each year and make repairs as necessary. All outfall protection and/or bank stability problems identified during the inspection shall be corrected in accordance with the New York Standards and Specifications for Erosion and Sediment Control;

(Part IX.A.6.a.)

iii. policy and procedures for the inspection, maintenance and repair of a *covered entity's* stormwater management practices. The inspection and maintenance schedule for all stormwater management practices shall assure continued operation of stormwater management practices; and

iv. develop a Corrective Action Plan for each Stormwater Conveyance System component that has been identified as needing repair. A file of all corrective actions implemented and *illicit discharges* detected and repaired should be maintained for a period of not less than five years.

b. By December 31, 2010, develop and implement a turf management practices and procedures policy. The policy shall address the following:

i. procedures for proper fertilizer application on municipally-owned lands. The application of any phosphorus-containing fertilizer (as labeled) shall only be allowed following a proper soil test and analysis documenting that soil phosphorus concentrations are inadequate;

ii. procedures for the proper disposal of grass clippings from municipally-owned lawns where grass clipping collection equipment is used. Grass clippings shall be disposed of in a compost pile or a proper containment device so that they cannot enter the *small MS4* or surface waters;

iii. procedures for the proper disposal of leaves from municipally-owned lands where leaves are collected. Leaves shall be disposed of in a compost pile or a proper containment device so that they cannot enter *small MS4s* or surface waters;

iv. for municipalities with lawn waste collection programs, the development of a curbside lawn waste management policy which ensures that lawn waste does not decay and release phosphorus to the storm sewer system; and

v. the planting of wildflowers and other native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

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B. Other Phosphorus Watershed MS4s (Mapped in Appendices 4, 5, and 10)

Table IX.B - Pollutant Load Reduction and Timetable for Other Phosphorus Watershed Improvement Strategy Areas

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Waste Load Allocation %*)	Pollutant Load Reduction Deadline
Greenwood Lake	05/01/2011	03/09/2011	43* (load allocation)	03/09/2011
Onondaga Lake	TMDL approval + 3 years	TMDL approval + 3 years	TBD	TMDL approval + 13 years
Oscawana Lake	05/01/2013	Not Applicable	18	2020

By the deadline defined in the Table IX.B, covered entities in these watersheds shall, in addition to the requirements in Part VII or VIII, depending on the type of the MS4, develop and implement the following minimum control measures for areas within the permitttee's jurisdiction and the covered entities's storm sewersheds:

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use* control, *traditional non-land use control* and *non-traditional MS4s*.

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of phosphorus (the POC) on waterbodies. The program must identify potential sources of Phosphorus in stormwater runoff and describe steps that contributors can take to reduce Phosphorus in stormwater runoff.

b. develop, or acquire if currently available, specific educational material dealing with sources of Phosphorus in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:
   i. understanding the phosphorus issue;
   ii. septic systems as a source of phosphorus; and
   iii. phosphorus concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination applicable to *traditional land use control* and *traditional non-land use control* MS4s, except within the Onondaga Lake Watershed.

a. *Develop*, *implement* and enforce a program that ensures that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five

(Part IX.B.3.a.)

years and, where necessary, maintained or rehabilitated. Conduct of regular field investigations/inspections should be done in accordance with the most current version of the EPA publication entitled Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant. Program development shall include the establishment of the necessary legal authority to implement the program.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management, - applicable to *traditional land use*, *traditional non-land use control* and *non-traditional MS4s*.

a. The *covered entity* must require the use of the "Enhanced Phosphorus Removal Design Standards"in accordance with NYS Stormwater Design Manual;

b. *Develop* and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant Phosphorus. At a minimum, the MS4 shall:

   i. establish procedures to identify sites with erosion and/or pollutant loading problems;

   ii. establish policy and procedures for project selection. Project selection should be based on the Phosphorus reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

   iii. establish policy and procedures for project permitting, design, funding, construction and maintenance

(Part IX.B.5.)

iv. by the date specified for each watershed in the appropriate Watershed Improvement Strategy Requirement Table develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

a. Develop a turf management practices and procedures policy. The policy should address the following:

i. procedures for proper fertilizer application on municipally-owned lands. The application of any phosphorus-containing fertilizer (as labeled) shall only be allowed following a proper soil test and analysis documenting that soil phosphorus concentrations are inadequate; and

ii. the planting of native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

(Part IX.)

C. Pathogen Impaired Watershed MS4s (Mapped in Appendix 6, 7 and 9)

Table IX.C - Pollutant Load Reduction and Timetable for Pathogen Impaired Watershed Improvement Strategy Areas

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Load Reduction (Waste Load Allocation %)	Pollutant Load Reduction Deadline
Budds Pond*	05/01/2013	09/30/2012	61	09/30/2022
Stirling Creek*	05/01/2013	09/30/2012	28	09/30/2022
Town & Jockey Creeks*	05/01/2013	09/30/2012	76	09/30/2022
Goose Creek*	05/01/2013	09/30/2012	70	09/30/2022
Hashamomuck Pond, Zone HP-1*	05/01/2013	09/30/2012	77	09/30/2022
Hashamomuck Pond , Zone HP-2*	05/01/2013	09/30/2012	43	09/30/2022
Richmond Creek*	05/01/2013	09/30/2012	71	09/30/2022
Deep Hole Creek*	05/01/2013	09/30/2012	29	09/30/2022
James Creek*	05/01/2013	09/30/2012	51	09/30/2022
Flanders Bay	05/01/2012	03/09/2012	98	03/09/2021
Reeves Bay	05/01/2012	03/09/2012	97	03/09/2021
Sebonac Creek	05/01/2012	03/09/2012	58	03/09/2021
North Sea Harbor, Zone NSH-1	05/01/2012	03/09/2012	97	03/09/2021
North Sea Harbor, Zone NSH-2	05/01/2012	03/09/2012	62	03/09/2021
North Sea Harbor, Zone NSH-3	05/01/2012	03/09/2012	99	03/09/2021
North Sea Harbor, Zone NSH-5	05/01/2012	03/09/2012	74	03/09/2021
Wooley Pond	05/01/2012	03/09/2012	97	03/09/2021
Noyac Creek, Zone NC-1	05/01/2012	03/09/2012	64	03/09/2021
Sag Harbor, Zone SH-2*	05/01/2013	09/30/2012	50	09/30/2022
Northwest Creek*	05/01/2013	09/30/2012	76	09/30/2022
Acabonac Harbor, Zone AH-2*	05/01/2013	09/30/2012	42	09/30/2022
Acabonac Harbor, Zone AH-3*	05/01/2013	09/30/2012	85	09/30/2022
Acabonac Harbor, Zone AH-4*	05/01/2013	09/30/2012	81	09/30/2022
Acabonac Harbor, Zone AH-5*	05/01/2013	09/30/2012	87	09/30/2022
Montauk Lake, Zone LM-1*	05/01/2013	09/30/2012	52	09/30/2022
Montauk Lake, Zone LM-2*	05/01/2013	09/30/2012	52	09/30/2022
Montauk Lake, Zone LM-3*	05/01/2013	09/30/2012	48	09/30/2022
Little Sebonac Creek	05/01/2012	03/09/2012	70	03/09/2021
Oyster Bay (Harbor 2)	05/01/2012	03/09/2012	20	03/09/2021
Oyster Bay (Harbor 3)	05/01/2012	03/09/2012	90	03/09/2021

*Additionally Designated Area

Watershed	Watershed Improvement Strategy Deadline	First Retrofit Plan Submission Deadline	Pollutant Reduction (Waste Load Allocation %)	Pollutant Load Reduction Deadline
Hempstead Harbor, north, and tidal tributaries	05/01/2013	09/30/2012	95	09/30/2022
Cold Spring Harbor, and tidal tributaries, Inner	05/01/2013	09/30/2012	95	09/30/2022
Cold Spring Harbor, Eel Creek	05/01/2013	09/30/2012	90	09/30/2022
Huntington Harbor	05/01/2013	09/30/2012	89	09/30/2022
Centerport Harbor	05/01/2013	09/30/2012	91	09/30/2022
Northport Harbor	05/01/2013	09/30/2012	92	09/30/2022
Stony Brook Harbor and West Meadow Creek	05/01/2013	09/30/2012	99	09/30/2022
Stony Brook Creek	05/01/2013	09/30/2012	99	09/30/2022
Stony Brook Yacht Club	05/01/2013	09/30/2012	48	09/30/2022
Port Jefferson Harbor, North and tribs	05/01/2013	09/30/2012	94	09/30/2022
Conscience Bay and tidal tribs	05/01/2013	09/30/2012	99	09/30/2022
Setaukut Harbor, Little Bay	05/01/2013	09/30/2012	84	09/30/2022
Setauket Harbor, East Setauket	05/01/2013	09/30/2012	79	09/30/2022
Setauket Harbor, Poquot	05/01/2013	09/30/2012	100	09/30/2022
Mt. Sinai Harbor, Crystal Brook	05/01/2013	09/30/2012	88	09/30/2022
Mt. Sinai Harbor, Inner Harbor	05/01/2013	09/30/2012	96	09/30/2022
Mt. Sinai Harbor, Pipe Stave Hollow	05/01/2013	09/30/2012	93	09/30/2022
Mattituck Inlet/Creek, Low, and tidal tributaries	05/01/2013	09/30/2012	64	09/30/2022
Goldsmith Inlet	05/01/2013	09/30/2012	91	09/30/2022
West Harbor - Darby Cove	05/01/2013	09/30/2012	41	09/30/2022

Georgica Pond, Upper	05/01/2013	09/30/2012	93	09/30/2022
Georgica Pond, Lower	05/01/2013	09/30/2012	93	09/30/2022
Georgica Pond Cove	05/01/2013	09/30/2012	92	09/30/2022
Sagaponack Pond	05/01/2013	09/30/2012	88	09/30/2022
Mecox Bay and tributaries	05/01/2013	09/30/2012	89	09/30/2022
Heady Creek and tributaries	05/01/2013	09/30/2012	88	09/30/2022
Taylor Creek and tributaries	05/01/2013	09/30/2012	52	09/30/2022
Penny Pond	05/01/2013	09/30/2012	31	09/30/2022
Weesuck Creek and tidal tributaries	05/01/2013	09/30/2012	37	09/30/2022
Penniman Creek and tidal tributaries	05/01/2013	09/30/2012	32	09/30/2022
Ogden Pond	05/01/2013	09/30/2012	28	09/30/2022
Quantuck Bay-Quantuck Creek	05/01/2013	09/30/2012	91	09/30/2022
Quantuck Canal/Moneybogue Bay	05/01/2013	09/30/2012	62	09/30/2022
Seatuck Cove	05/01/2013	09/30/2012	94	09/30/2022
Harts Cove	05/01/2013	09/30/2012	12	09/30/2022
Narrow Bay	05/01/2013	09/30/2012	16	09/30/2022
Bellport Bay, Beaver Dam Creek	05/01/2013	09/30/2012	94	09/30/2022
Bellport Bay, West Cove	05/01/2013	09/30/2012	94	09/30/2022
Patchogue Bay, Swan River	05/01/2013	09/30/2012	90	09/30/2022
Patchogue Bay, Mud Creek	05/01/2013	09/30/2012	71	09/30/2022

By the deadline defined in the Table IX.C, *covered entities* in these watersheds shall, in addition to the requirements in Part VII. or VIII., depending on the type of the MS4, develop and implement the following MCMs for areas within the *covered entity*'s jurisdiction and the covered entities's storm sewersheds:

(Part IX.C.)

1. Public Education and Outreach on Stormwater Impacts- applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of Pathogens (the *POC*) on waterbodies. The program must identify potential sources of Pathogens in *stormwater* runoff and describe steps that contributors can take to reduce the Pathogens in *stormwater* runoff. The program must also describe steps that contributors of non-*stormwater discharges* can take to reduce Pathogens.

b. *Develop*, or acquire if currently available, specific educational material dealing with sources of Pathogens in *stormwater* and pollutant reduction practices. At a minimum, the educational material should address the following topics:

i. where, why, and how Pathogens pose threats to the environment and to the community;

ii. septic systems, geese and pets as a source of pathogens;

iii. dissemination of educational materials / surveys to households/businesses in proximity to Pathogen *TMDL* waterbodies; and

iv. education for livestock / horse boarders regarding manure *BMP*s.

2. Public Involvement / Participation

No additional requirements proposed at this time.

3. Illicit Discharge Detection and Elimination, **SWMP Development / Implementation**- Mapping applicable to *traditional land use* control and *traditional non-land use control MS4s*.

a. Develop, implement, and enforce a program to detect and eliminate discharges to the municipal separate storm sewer system from on-site sanitary systems in areas where factors such as shallow groundwater, low infiltrative soils, historical on-site sanitary system failures, or proximity to pathogen-impaired waterbodies, indicate a reasonable likelihood of system discharge.

In such areas, ensure that on-site sanitary systems designed for less than 1000 gallons per day (septic systems, cesspools, including any installed absorption fields) are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated. Conduct regular field investigations/inspections in accordance with the most current version of the EPA publication entitled Illicit Discharge

(Part IX.C.3.a.)

Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment, to detect the presence of ongoing and/or intermittent on-site sanitary discharges to the storm sewer system. An advanced system inspection requiring completion by a certified professional is not required by this permit, but may be used where site specific conditions warrant.

On-site sanitary system IDDE program development shall include the establishment of the necessary legal authority (such as new or revised local laws) for implementation and enforcement.

b. Develop and maintain a map showing the entire *small MS4* conveyance system. The *covered entity* shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by May 1, 2015. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

i. type of conveyance system - closed pipe or open drainage;
ii. for closed pipe systems - pipe material, shape, and size;
iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
iv. drop inlet, catch basin, and manhole locations; and
v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24000 or better.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management- applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce pollutant loading problems, with a particular emphasis placed on the pollutant Pathogens. At a minimum, the MS4 shall:

a. establish procedures to identify sites with erosion and/or pollutant loading problems;

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b. establish policy and procedures for project selection. Project selection should be based on the Pathogen reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

c. establish policy and procedures for project permitting, design, funding, construction and maintenance

d. by the deadlines specified in Table IX.C, develop and submit approvable plans and schedules for completing retrofit projects. Upon DEC approval of those plans and schedules and identification of funding sources, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations, - applicable to *traditional land use control* and traditional non-land use control MS4s.

a. *Develop*, enact and enforce a local law prohibiting pet waste on municipal properties and prohibiting goose feeding.

b. *Develop* and *implement* a pet waste bag program for collection and proper disposal of pet waste.

c. *Develop* a program to manage goose populations.

(Part IX.)

D. Nitrogen Watershed MS4s (Mapped in Appendix 8)

Table IX.D - Pollutant Load Reduction and Timetable for Nitrogen Watershed Improvement Strategy Area

Watershed	Watershed Improvement Strategy Deadline	Retrofit Plan Submission Deadline	Pollutant Reduction (Load Allocation %)	Pollutant Load Reduction Deadline
Peconic Bay	05/01/2011	03/09/2011	15	03/09/2021

By the deadline defined in the Table IX.D, covered entities in these watersheds shall, in addition to the requirements in Part VII or VIII, depending on the type of the MS4, develop and implement the following minimum control measures for areas within the covered entity's jurisdiction and the covered entities' storm sewersheds:

1. Public Education and Outreach on Stormwater Impacts - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

a. Plan and conduct an ongoing public education and outreach program designed to describe the impacts of Nitrogen (the POC) on waterbodies. The program must identify potential sources of Nitrogen in stormwater runoff and describe steps that contributors can take to reduce the Nitrogen in stormwater runoff.

b. develop, or acquire if currently available, specific educational material dealing with sources of Nitrogen in stormwater and pollutant reduction practices. At a minimum, the educational material should address the following topics:

i. understanding the Nitrogen issue;
ii. septic systems as a source of Nitrogen; and
iii. Nitrogen concerns with fertilizer use.

2. Public Involvement/ Participation

No additional requirements proposed for at this time.

3. Illicit Discharge Detection and Elimination - applicable to *traditional land use control* and *traditional non-land use control MS4s*

(Part IX.D.3.)

a. Develop and maintain a map showing the entire small MS4 conveyance system. The covered entity shall complete the mapping of approximately 20% of the system every year, with the entire system being mapped by May 1, 2015. At a minimum, the map and/or supportive documentation for the conveyance system shall include the following information:

i. type of conveyance system - closed pipe or open drainage;
ii. for closed pipe systems - pipe material, shape, and size;
iii. for open drainage systems - channel/ditch lining material, shape, and dimensions; location and dimensions of any culvert crossings;
iv. drop inlet, catch basin, and manhole locations; and
v. number and size of connections (inlets/outlets) to catch basins and manholes, direction of flow.

All information shall be prepared in digital format suitable for use in GIS software and in accordance with the *Department's* guidance on Illicit Discharge Detection and Elimination. The scale shall be 1:24000 or better.

4. Construction Site Stormwater Runoff Control

No additional requirements at this time.

5. Post-Construction Stormwater Management - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.
Develop and commence implementation of a Retrofit Program that addresses runoff from sites to correct or reduce existing erosion and/or pollutant loading problems, with a particular emphasis placed on the pollutant Nitrogen. At a minimum, the MS4 shall:

a. establish procedures to identify sites with erosion and/or pollutant loading problems;

b. establish policy and procedures for project selection. Project selection should be based on the Nitrogen reduction potential of the specific retrofit being constructed/installed; the ability to use standard, proven technologies; and the economic feasibility of constructing/installing the retrofit. As part of the project selection process, the *covered entity* should participate in locally based watershed planning efforts which involve the *Department*, other *covered entities*, stakeholders and other interested parties;

c. establish policy and procedures for project permitting, design, funding, construction and maintenance; and

(Part IX.D.5.)

d. by March 9, 2011, develop and submit approvable plans and schedules for completing retrofit projects, including identification of funding sources. Upon DEC approval of those plans and schedules, the plans and schedules shall become enforceable requirements of this permit.

6. Pollution Prevention/Good Housekeeping For Municipal Operations - applicable to *traditional land use control*, *traditional non-land use control* and *non-traditional MS4s*.

a. Develop a turf management practices and procedures policy. The policy should address the following:

i. procedures for proper fertilizer application on municipally-owned lands. The application of any Nitrogen-containing fertilizer shall only be allowed under the supervision of a Certified Crop Advisor or Certified Landscape Architect; and

ii. the planting of native plant material to lessen the frequency of mowing and reduce the use of chemicals to control vegetation.

Part X. ACRONYMS AND DEFINITIONS

A. Acronym List

BMP - Best Management Practice
CFR - Code of Federal Regulations
CWA - Clean Water Act
ECL - Environmental Conservation Law
MCC - Municipal Compliance Certification
MCM - Minimum Control Measure
MEP - Maximum Extent Practicable
MS4 - Municipal Separate Storm Sewer System
NPDES - National Pollutant Discharge Elimination System
POC - Pollutant of Concern
SPDES - State Pollutant Discharge Elimination System
SWMP - Stormwater Management Program
SWMP Plan - Stormwater Management Program Plan
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
UA - Urbanized Area

B. Definitions

Activities - See best management practice

Additionally Designated Areas - EPA required the Department to develop a set of criteria for designating additional MS4 areas as subject to these regulations. The following criteria have been adopted to designate additional MS4s in New York State:

Criteria 1: MS4s discharging to waters for which and EPA-approved TMDL required reduction of a pollutant associated with stormwater beyond what can be achieved with existing programs (and the area is not already covered under automatic designation as UA).

Criteria 2: MS4s contiguous to automatically designated urbanized areas (town lines) that discharge to sensitive waters classified as AA Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

Criterion 3: Automatically designated MS4 areas are extended to Town, Village or City boundaries, but only for Town, Village or City implementation of Minimum Control Measures (4) Construction Site Stormwater Runoff Control and (5) Post Construction Stormwater Management in Development and Redevelopment. This additional designation may be waived, by written request to the Department, where the automatically designated area is a small portion of the total area of the Town, Village or City (less than 15 %) and where there is

little or no construction activity in the area outside of the automatically designated area (less than 5 disturbed acres per year).

Best Management Practice - means schedules activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements (if determined necessary by the covered entity), operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to stormwater discharges. BMP is referred to in EPA's fact sheets and other materials. BMPs are also referred to as "activities" or "management practices" throughout this *SPDES general permit*.

Better Site Design (BSD) - Better Site Design incorporates non-structural and natural approaches to new and redevelopment projects to reduce impacts on watersheds by conserving natural areas, reducing impervious cover and better integrating stormwater treatment. Better site design is a form of Green Infrastructure and is similar to Low Impact Development (LID). See also Green Infrastructure and Low Impact Development.

Construction Activity(ies) - means any clearing, grading, excavation, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Covered entity - means the holder of this *SPDES general permit* or an entity required to gain coverage under this *SPDES general permit*. The owner / operator of the small MS4.

Department - means the New York State Department of Environmental Conservation as well as meaning the Department 's designated agent.

Development - period after initial authorization under this *SPDES general permit* when the covered entity creates, designs or develops activities, BMPs, tasks or other measures to include in their SWMP

Discharge(s) - any addition of any pollutant to waters of the State through an outlet or point source.

Discharge Authorized by a SPDES Permit - means discharges of wastewater or stormwater from sources listed in the permit, that do not violate ECL Section 17-0501, that are through outfalls listed in the permit, and that are:

1. discharges within permit limitations of pollutants limited in the SPDES permit;

2. discharges within permit limitations of pollutants limited by an indicator limit in the SPDES permit;
3. discharges of pollutants subject to action level requirements in the SPDES permit;
4. discharges of pollutants not explicitly listed in the SPDES permit, but reported in the SPDES permit application record as detected in the discharge or as something the covered entity knows or has reason to believe to be present in the discharge, provided the special conditions section of the applicable SPDES permit does not otherwise forbid such a discharge and provided that such discharge does not exceed, by an amount in excess of normal effluent variability, the level of discharge that may reasonably be expected for that pollutant from information provided in the SPDES permit application record;
5. discharges of pollutants not required to be reported on the appropriate and current New York State SPDES permit application; provided the special conditions section of the permit does not otherwise forbid such a discharge. The Department may, in accordance with law and regulation, modify the permit to include limits for any pollutant even if that pollutant is not required to be reported on the SPDES permit application; or
6. discharges from fire fighting activities; fire hydrant flushings; testing of fire fighting equipment, provided that such equipment is for water only fire suppression; potable water sources including waterline flushings; irrigation drainage; lawn watering; uncontaminated infiltration and inflow; leakage from raw water conveyance systems; routine external building washdown and vehicle washing which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials, other than minor and routine releases from motor vehicles, have not occurred (unless such material has been removed) and where detergents are not used; air conditioning and steam condensate; springs; uncontaminated groundwater; and foundation or footing drains where flows are not contaminated with process materials such as solvents provided that the covered entity has implemented an effective plan for minimizing the discharge of pollutants from all of the sources listed in this subparagraph.

Environmental Conservation Law - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Green Infrastructure - Green infrastructure approaches essentially infiltrate, evapotranspirate or reuse stormwater, with significant utilization of soils and vegetation rather than traditional hardscape collection, conveyance and storage structures . Common green infrastructure approaches include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, vegetated median strips, reforestation, and protection and enhancement of riparian buffers and floodplains. See also Low Impact Development and Better Site Design.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the

atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Illicit Discharges - discharges not entirely composed of stormwater into the small MS4, except those identified in Part I.A.2. Examples of illicit discharges are non-permitted sanitary sewage, garage drain effluent, and waste motor oil. However, an illicit discharge could be any other non-permitted discharge which the covered entity or Department has determined to be a substantial contributor of pollutants to the small MS4.

Impaired Water - a water is impaired if it does not meet its designated use(s). For purposes of this permit 'impaired' refers to impaired waters for which TMDLs have been established, for which existing controls such as permits are expected to resolve the impairment, and those needing a TMDL. Impaired waters compilations are also sometimes referred to as 303(d) lists; 303(d) lists generally include only waters for which TMDLs have not yet been developed. States will generally have associated, but separate lists of impaired waters for which TMDLs have already been established.

Implementation - period after development of SWMP, where the covered entity puts into effect the practices, tasks and other activities in their SWMP.

Individual SPDES Permit - means a SPDES permit issued to a single facility in one location in accordance with this Part (as distinguished from a *SPDES general permit*).

Industrial Activity - as defined by the SPDES Multi-Sector General Permit (GP-0-06-002).

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, State Environmental Quality Review Act Application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Low Impact Development - is a site design strategy with a goal of maintaining or replicating the predevelopment hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration,

and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro scale stormwater retention and detention areas, reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other strategies include the preservation/protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands and highly permeable soils. LID principles are based on controlling stormwater at the source by the use of micro scale controls that are distributed throughout the site. This is unlike conventional approaches that typically convey and manage runoff in large facilities located at the base of drainage areas. See also Green Infrastructure and Better Site Design.

Management Practices - See best management practices

Maximum Extent Practicable - is a technology-based standard established by Congress in the Clean Water Act §402(p)(3)(B)(iii). Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs. (40CFR 122.2 See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). When trying to reduce pollutants to the MEP, there must be a serious attempt to comply, and practical solutions may not be lightly rejected. If a covered entity chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a covered entity employs all applicable BMPs except those where it can be shown that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the statndard. MEP required covered entities to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive.

Measurable Goals - are the goals of the SWMP that should reflect the needs and characteristics of the covered entity and the areas served by its small MS4. Furthermore, the goals should be chosen using an integrated approach that fully addresses the requirements and intent of the MCM. The assumption is that the program schedules would be created over a 5 year period and goals would be integrated into that time frame. For example, a larger MS4 could do an outfall reconnaissance inventory for 20% of the collection system every year so that every outfall is inspected once within the permit cycle

Municipal / Municipalities - referred to in the federal rule that describes the Phase II stormwater program includes not only the State's municipal governments (cities, towns, villages and counties), but any publicly funded entity that owns or operates a separate storm sewer system. Examples of other public entities that are included in this program include the State Department of Transportation, State University Campuses, federal and State prisons, State and federal hospitals, Thruway and Dormitory Authorities, public housing authorities, school and other special districts.

Municipal Separate Storm Sewer System - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that discharges to surface waters of the State;
2. designed or used for collecting or conveying stormwater;
3. which is not a combined sewer; and
4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Non-traditional MS4s - state and federal prisons, office complexes, hospitals; state: transportation agencies; university campuses, public housing authorities, schools, other special districts.

Open Meetings Law - per Public Officers Law, Article 7, Open Meetings Law, Section 104, Public notice:
1. Public notice of the time and place of a meeting scheduled at least one week prior thereto shall be given to the news media and shall be conspicuously posted in one or more designated public locations at least seventy two hours before such meeting.
2. Public notice of the time and place of every other meeting shall be given, to the extent practicable, to the news media and shall be conspicuously posted in one or more designated public locations at a reasonable time prior thereto.
3. The public notice provided for by this section shall not be construed to require publication as a legal notice.
4. If videoconferencing is used to conduct a meeting, the public notice for the meeting shall inform the public that videoconferencing will be used, identify the locations for the meeting, and state that the public has the right to attend the meeting at any of the locations.

Operator - the person, persons or legal entity that is responsible for the small MS4, as indicated by signing the NOI to gain coverage for the MS4 under this *SPDES general permit*.

Outfall - is defined as any point where a municipally owned and operated separate storm sewer system discharges to either surface waters of the State or to another MS4. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow. However, areas of non-concentrated (sheet) flow which drain to surface waters of the State or to another MS4's system are not considered outfalls and should not be identified as such on the system map.

Pollutants of Concern - there are POCs that are primary (comprise the majority) sources of stormwater pollutants and others that are secondary (less likely).

- The POCs that are primarily of concern are: nitrogen, phosphorus, silt and sediment, pathogens, flow, and floatables impacting impaired waterbodies listed on the Priority Waterbody List known to come in contact with stormwater that could be discharged to that water body.

- The POCs that are secondarily of concern include but are not limited to petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs), where stormwater or runoff is listed as the source of this impairment.

- The primary and secondary POCs can also impair waters not on the 303(d) list. Thus, it is important for the covered entity to assess known and potential POCs within the area served by their small MS4. This will allow the covered entity to address POCs appropriate to their MS4.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Reporting Date – means the end of the annual reporting period, March 9, as indicated in Part V.C.1.

Retrofit - means modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings. Examples, some of which may not be effective for all pollutants, include:

Better site design approaches such as roof top disconnection, diversion of runoff to infiltration areas, soil de-compaction, riparian buffers, rain gardens, cisterns

Rehabilitation of existing storm sewer system by installation of standard stormwater treatment systems (ponds, wetlands, filtering, infiltration) or proprietary practices

Stabilize dirt roads (gravel, stone, water bar, check dam, diversion)

Conversion of dirt parking lots to pervious pavement, grassed or stone cover

Conversion of dry detention ponds to extended detention or wetland treatment systems

Retrofit by converting abandoned buildings to stormwater treatment systems

Retrofit of abandoned building to open space

Retrofit road ditches to enhance open channel design

Control the downstream effects of runoff from existing paved surfaces resulting in flooding and erosion in receiving waters

Control stream erosion by plunge pool, velocity dissipaters, and flow control devices for discharges from conveyance systems

Upgrade of an existing conveyance system to provide water quality and /or quantity control within the drainage structure

Section 303(d) Listed Waters - Section 303(d) is part of the federal CWA that requires the Department to periodically to prepare a list of all surface waters in the State for which beneficial uses of the water – such as for drinking, recreation, aquatic habitat, and industrial use – are impaired by pollutants. These are water quality-limited estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. Refer to impaired waters for more information.

Single entity - An entity, formed in accordance with the applicable state and/or local legislation, with a legal authority and capacity (financial, resources, etc...) that gains coverage under the MS4 general permit to implement all or parts of the MS4 program within a jurisdiction on behalf of multiple MS4s in that geographic area.

Small MS4 - MS4 system within an urbanized area or other areas designated by the State.

SPDES general permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

Staff - actual employees of the covered entity or contracted entity.

State - means the State of New York.

State Pollutant Discharge Elimination System - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Stormwater - means that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the state.

Stormwater Management Program - the program implemented by the covered entity. Covered entities are required at a minimum to develop, implement and enforce a SWMP designed to address POCs and reduce the discharge of pollutants from the small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the *ECL* and Clean Water Act. The SWMP must address the MCM described in Part VIII.

The *SWMP* needs to include *measurable goals* for each of the *BMP*s. The measurable goals will help the covered entities assess the status and progress of their program. The SWMP should:

1. describe the BMP / measureable goal;
2. identify time lines / schedules and milestones for development and implementation;
3. include quantifiable goals to assess progress over time; and
4. describe how the covered entity will address POCs.

Guidance on developing SWMPs is available from the Department on its website. Examples of successful SWMPs and suggested measurable goals are also provided in EPA's Menu of BMPs available from its website. Note that this information is for guidance purposes only. An MS4 may choose to develop or implement equivalent methods equivalent to those made available by the Department and EPA to demonstrate compliance with the MCMs.

When creating the *SWMP*, the *covered entities s*hould assess activities already being performed that could help meet, or be modified to meet, permit requirements and be included in the *SWMP*. *Covered entities* can create their *SWMP* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Stormwater Management Program Plan- used by the covered entity to document developed, planned and implemented SWMP elements. The *SWMP plan* must describe how pollutants in stormwater runoff will be controlled. For previously unauthorized *small MS4s* seeking coverage, information included in the NOI should be obtained from the *SWMP plan*. The *SWMP plan* is a separate document from the NOI and should not be submitted with the NOI or any annual reports unless requested.

The *SWMP plan* should include a detailed written explanation of all management practices, activities and other techniques the covered entity has developed, planned and implemented for their SWMP to address POCs and reduce pollutant discharges from their small MS4 to the MEP. The *SWMP plan* shall be revised to incorporate any new or modified *BMP*s or *measurable goals*.

Covered entities can create their *SWMP plan* individually, with a group of other individual *covered entities* or a coalition of *covered entities*, or through the work of a third party entity.

Documents to include are: applicable local laws, inter-municipal agreements and other legal authorities; staffing and staff development programs and organization charts; program budget; policy, procedures, and materials for each minimum measure; outfall and small MS4 system maps; stormwater management practice selection and measurable goals; operation and maintenance schedules; documentation of public outreach efforts and public comments; submitted construction site SWPPPs and review letters and construction site inspection reports.

The *SWMP plan* shall be made readily available to the covered entity's staff and to the public and regulators, such as *Department* and EPA staff. Portions of the *SWMP plan*, primarily policies and procedures, must be available to the management and staff of a *covered entity* that will be called upon to use them. For example, the technical standards and associated technical assistance documents and manuals for stormwater controls should be available to code enforcement officers, review engineers and planning boards. The local laws should be readily available to the town board and planning board. An integrated pest management program would have to be available to the the parks department and the stormwater outfall and available sewer system mapping and catch basin cleaning schedule would have to be available to the department of public works.

Storm sewershed - the catchment area that drains into the storm sewer system based on the surface topography in the area served by the stormsewer. Adjacent catchment areas that drain to adjacent outfalls are not separate storm sewersheds.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of

surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Storm sewers are not waters of the state unless they are classified in 6 NYCRR Parts 800 to 941. Nonetheless, a discharge to a storm sewer shall be regulated as a discharge at the point where the storm sewer discharges to waters of the state. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act and Environmental Conservation Law (other than cooling ponds as defined in 40 CFR 423.11(m)(see section 750 - 1.24) which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the State (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

SWPPP - as defined per the NYS DEC SPDES General Permit for Stormwater Discharges from Construction Activity or NYS DEC SPDES Multi-Sector General Permit for Stormwater Associated with Industrial Activity .

Total Maximum Daily Load - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations for point source discharges, load allocations for nonpoint sources, and a margin of safety.

Traditional Land Use Control MS4s - means a city, town or village with land use control authority.

Traditional Non-land Use Control MS4s - means any county agency without land use control.

Urbanized Area - is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile, as defined by the US Bureau of Census. Outlines the extent of automatically regulated areas, often do not extend to the political boundaries of a city, town, or village. SWMPs are only required within the UA. However, the Department encourages covered entities to voluntarily extend their SWMP programs at least to the extent of the storm sewershed that flows into the UA or extend further to their entire jurisdiction. For ease of creation and administration of local laws, ordinances or other regulatory mechanisms, these should be created to apply to the full jurisdictional boundary of municipalities.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

Part XI. RE-OPENER CLAUSE

If there is evidence indicating that the stormwater discharges authorized by this permit cause or have the reasonable potential to cause or contribute to a violation of a water quality standard, the covered entity may be required at the Department 's sole discretion to obtain an individual SPDES permit or an alternative *SPDES general permit* or the permit may be modified. In addition, coverage under this permit could terminate, meaning the discharge must cease.

APPENDICES

APPENDIX 1: LIST OF NYS DEC REGIONAL OFFICES

Region	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS	DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD, PO BOX 220 WARRENSBURG, NY 12885-0220 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

APPENDIX 2: IMPAIRED SEGMENTS AND PRIMARY POLLUTANTS OF CONCERN

COUNTY	WATERBODY NAME	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	phosphorus
Albany	Basic Creek Reservoir	phosphorus
Bronx	Van Cortlandt Lake	phosphorus
Bronx	Bronx River, Lower	pathogens
Bronx	Bronx River, Lower	floatables
Bronx	Bronx River, Middle, and tribs	pathogens
Bronx	Bronx River, Middle, and tribs	floatables
Bronx	Westchester Creek	floatables
Bronx	Hutchinson River, Lower, and tribs	floatables
Broome	Susquehanna River, Lower, Main Stem	pathogens
Broome	Whitney Point Lake/Reservoir	phosphorus
Broome	Park Creek and tribs	pathogens
Broome	Beaver Lake	phosphorus
Broome	White Birch Lake	phosphorus
Cayuga	Little Sodus Bay	phosphorus
Cayuga	Owasco Lake	pathogens
Cayuga, Tompkins	Owasco Inlet, Upper, and tribs	phosphorus
Chautauqua	Lake Erie (Dunkirk Harbor)	pathogens
Chautauqua	Chadakoin River and tribs	phosphorus
Chautauqua	Chautauqua Lake, South	phosphorus
Chautauqua	Chautauqua Lake, North	phosphorus
Chautauqua	Bear Lake	phosphorus
Chautauqua	Lower Cassadaga Lake	phosphorus
Chautauqua	Middle Cassadaga Lake	phosphorus
Chautauqua	Findley Lake	phosphorus
Chenango	Unadilla River, Lower, Main Stem	pathogens
Clinton	Lake Champlain, Main Lake, North	phosphorus
Clinton	Lake Champlain, Main Lake, Middle	phosphorus
Clinton	Great Chazy River, Lower, Main Stem	silt/sediment
Columbia	Robinson Pond	phosphorus
Columbia	Kinderhook Lake	phosphorus
Delaware	Cannonsville Reservoir	phosphorus
Dutchess	Hillside Lake	phosphorus
Dutchess	Wappinger Lakes	phosphorus
Dutchess	Wappinger Lakes	silt/sediment
Dutchess	Fall Kill and tribs	phosphorus
Dutchess	Rudd Pond	phosphorus
Erie	Ellicott Creek, Lower, and tribs	phosphorus
Erie	Ellicott Creek, Lower, and tribs	silt/sediment

COUNTY	WATERBODY NAME	POLLUTANT
Erie	Ransom Creek, Lower, and tribs	pathogens
Erie	Ransom Creek, Upper, and tribs	pathogens
Erie	Beeman Creek and tribs	phosphorus
Erie	Beeman Creek and tribs	pathogens
Erie	Murder Creek, Lower, and tribs	phosphorus
Erie	Murder Creek, Lower, and tribs	pathogens
Erie	Two Mile Creek and tribs	pathogens
Erie	Two Mile Creek and tribs	floatables
Erie	Scajaquada Creek, Lower, and tribs	floatables
Erie	Scajaquada Creek, Lower, and tribs	pathogens
Erie	South Branch Smoke Cr, Lower, and tribs	phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs	silt/sediment
Erie	Rush Creek and tribs	pathogens
Erie	Rush Creek and tribs	phosphorus
Erie	Little Sister Creek, Lower, and tribs	phosphorus
Erie	Little Sister Creek, Lower, and tribs	pathogens
Essex	Lake Champlain, Main Lake, South	phosphorus
Essex	Lake Champlain, South Lake	phosphorus
Genesee	Tonawanda Creek, Middle, Main Stem	phosphorus
Genesee	Tonawanda Creek, Middle, Main Stem	silt/sediment
Genesee	Tonawanda Creek, Upper, and minor tribs	silt/sediment
Genesee	Bowen Brook and tribs	phosphorus
Genesee	Little Tonawanda Creek, Lower, and tribs	silt/sediment
Genesee	Oak Orchard Cr, Upper, and tribs	phosphorus
Genesee	Black Creek, Upper, and minor tribs	phosphorus
Genesee	Bigelow Creek and tribs	phosphorus
Greene	Schoharie Reservoir	silt/sediment
Greene	Shingle Kill and tribs	pathogens
Greene	Sleepy Hollow Lake	silt/sediment
Herkimer	Unadilla River, Middle, and minor tribs	pathogens
Herkimer	Mohawk River, Main Stem	pathogens
Herkimer	Mohawk River, Main Stem	floatables
Herkimer	Steele Creek tribs	phosphorus
Herkimer	Steele Creek tribs	silt/sediment
Jefferson	Moon Lake	phosphorus
Kings	Coney Island Creek	pathogens
Kings	Coney Island Creek	floatables
Kings	Gowanus Canal	floatables
Kings	Hendrix Creek	nitrogen
Kings	Hendrix Creek	pathogens
Kings	Hendrix Creek	floatables
Kings	Paerdegat Basin	floatables

COUNTY	WATERBODY NAME	POLLUTANT
Kings	Mill Basin and tidal tribs	floatables
Lewis	Beaver River, Lower, and tribs	pathogens
Lewis	Beaver River, Lower, and tribs	floatables
Lewis	Mill Creek/South Branch, and tribs	phosphorus
Lewis	Mill Creek/South Branch, and tribs	pathogens
Livingston	Conesus Lake	phosphorus
Livingston	Jaycox Creek and tribs	phosphorus
Livingston	Jaycox Creek and tribs	silt/sediment
Livingston	Mill Creek and minor tribs	silt/sediment
Madison	Canastota Creek, Lower, and tribs	pathogens
Monroe	Rochester Embayment - West	pathogens
Monroe	Mill Creek and tribs	phosphorus
Monroe	Mill Creek and tribs	pathogens
Monroe	Shipbuilders Creek and tribs	phosphorus
Monroe	Shipbuilders Creek and tribs	pathogens
Monroe	Minor Tribs to Irondequoit Bay	phosphorus
Monroe	Minor Tribs to Irondequoit Bay	pathogens
Monroe	Thomas Creek/White Brook and tribs	phosphorus
Monroe	Buck Pond	phosphorus
Monroe	Long Pond	phosphorus
Monroe	Cranberry Pond	phosphorus
Monroe	Genesee River, Lower, Main Stem	phosphorus
Monroe	Genesee River, Lower, Main Stem	pathogens
Monroe	Genesee River, Lower, Main Stem	silt/sediment
Monroe	Genesee River, Middle, Main Stem	phosphorus
Monroe	Black Creek, Lower, and minor tribs	phosphorus
Nassau	Long Island Sound, Nassau County	pathogens
Nassau	Long Island Sound, Nassau County	nitrogen
Nassau	Manhasset Bay, and tidal tribs	pathogens
Nassau	Manhasset Bay, and tidal tribs	pathogens
Nassau	Hempstead Harbor, south, and tidal tribs	pathogens
Nassau	Glen Cove Creek, Lower, and tribs	pathogens
Nassau	Glen Cove Creek, Lower, and tribs	silt/sediment
Nassau	Dosoris Pond	pathogens
Nassau	Mill Neck Creek and tidal tribs	pathogens
Nassau	South Oyster Bay	pathogens
Nassau	East Bay	pathogens
Nassau	LI Tribs (fresh) to East Bay	phosphorus
Nassau	LI Tribs (fresh) to East Bay	silt/sediment
Nassau	Middle Bay	pathogens
Nassau	East Rockaway Inlet	pathogens
Nassau	Reynolds Channel, east	pathogens

COUNTY	WATERBODY NAME	POLLUTANT
Nassau	East Meadow Brook, Upper, and tribs	silt/sediment
Nassau	Hempstead Bay	Nitrogen
Nassau	Hempstead Bay	pathogens
Nassau	Hempstead Lake	phosphorus
Nassau	Grant Park Pond	phosphorus
Nassau	Woodmere Channel	pathogens
New York	East River, Lower	floatables
New York	Harlem River	floatables
Niagara	Bergholtz Creek and tribs	phosphorus
Niagara	Bergholtz Creek and tribs	pathogens
Oneida	Utica Harbor	pathogens
Oneida	Utica Harbor	floatables
Oneida	Mohawk River, Main Stem	pathogens
Oneida	Mohawk River, Main Stem	floatables
Oneida	Mohawk River, Main Stem	pathogens
Oneida	Mohawk River, Main Stem	floatables
Oneida	Ballou, Nail Creeks and tribs	phosphorus
Oneida	Ninemile Creek, Lower, and tribs	pathogens
Onondaga	Limestone Creek, Lower, and minor tribs	pathogens
Onondaga	Seneca River, Lower, Main Stem	pathogens
Onondaga	Onondaga Lake, northern end	phosphorus
Onondaga	Onondaga Lake, southern end	pathogens
Onondaga	Onondaga Lake, southern end	phosphorus
Onondaga	Minor Tribs to Onondaga Lake	phosphorus
Onondaga	Minor Tribs to Onondaga Lake	pathogens
Onondaga	Bloody Brook and tribs	pathogens
Onondaga	Ley Creek and tribs	pathogens
Onondaga	Ley Creek and tribs	phosphorus
Onondaga	Onondaga Creek, Lower, and tribs	phosphorus
Onondaga	Onondaga Creek, Lower, and tribs	pathogens
Onondaga	Onondaga Creek, Middle, and tribs	silt/sediment
Onondaga	Onondaga Creek, Middle, and tribs	phosphorus
Onondaga	Onondaga Creek, Middle, and tribs	pathogens
Onondaga	Onondaga Creek, Upper, and minor tribs	silt/sediment
Onondaga	Harbor Brook, Lower, and tribs	phosphorus
Onondaga	Harbor Brook, Lower, and tribs	pathogens
Onondaga	Ninemile Creek, Lower, and tribs	phosphorus
Onondaga	Ninemile Creek, Lower, and tribs	pathogens
Ontario	Hemlock Lake Outlet and minor tribs	phosphorus
Ontario	Hemlock Lake Outlet and minor tribs	pathogens
Ontario	Honeoye Lake	phosphorus
Ontario	Great Brook and minor tribs	phosphorus

COUNTY	WATERBODY NAME	POLLUTANT
Ontario	Great Brook and minor tribs	silt/sediment
Orange	Greenwood Lake	phosphorus
Oswego	Lake Neatahwanta	phosphorus
Otsego	Susquehanna River, Main Stem	pathogens
Putnam	Croton Falls Reservoir	phosphorus
Putnam	West Branch Reservoir	phosphorus
Putnam	Boyd Corners Reservoir	phosphorus
Putnam	Middle Branch Reservoir	phosphorus
Putnam	Lake Carmel	phosphorus
Putnam	Diverting Reservoir	phosphorus
Putnam	East Branch Reservoir	phosphorus
Putnam	Bog Brook Reservoir	phosphorus
Putnam	Oscawana Lake	phosphorus
Queens	Newtown Creek and tidal tribs	floatables
Queens	East River, Upper	floatables
Queens	East River, Upper	floatables
Queens	Flushing Creek/Bay	nitrogen
Queens	Flushing Creek/Bay	floatables
Queens	Little Neck Bay	pathogens
Queens	Alley Creek/Little Neck Bay Trib	floatables
Queens	Jamaica Bay, Eastern, and tribs	nitrogen
Queens	Jamaica Bay, Eastern, and tribs	pathogens
Queens	Jamaica Bay, Eastern, and tribs	floatables
Queens	Thurston Basin	floatables
Queens	Bergen Basin	Nitrogen
Queens	Bergen Basin	pathogens
Queens	Bergen Basin	floatables
Queens	Shellbank Basin	nitrogen
Queens	Spring Creek and tribs	pathogens
Queens	Spring Creek and tribs	floatables
Rensselaer	Snyders Lake	phosphorus
Richmond	Raritan Bay (Class SA)	pathogens
Richmond	Arthur Kill (Class I) and minor tribs	floatables
Richmond	Newark Bay	floatables
Richmond	Kill Van Kull	floatables
Richmond	Grasmere, Arbutus and Wolfes Lakes	phosphorus
Saratoga	Dwaas Kill and tribs	Phosphorus
Saratoga	Dwaas Kill and tribs	silt/sediment
Saratoga	Schuyler Creek and tribs	phosphorus
Saratoga	Schuyler Creek and tribs	pathogens
Saratoga	Lake Lonely	phosphorus
Saratoga	Tribs to Lake Lonely	Phosphorus

COUNTY	WATERBODY NAME	POLLUTANT
Saratoga	Tribs to Lake Lonely	pathogens
Schenectady	Collins Lake	phosphorus
Schoharie	Cobleskill Creek, Lower, and tribs	pathogens
Schoharie	Engleville Pond	phosphorus
Schoharie	Summit Lake	phosphorus
St.Lawrence	Black Lake Outlet/Black Lake	phosphorus
Steuben	Lake Salubria	phosphorus
Steuben	Smith Pond	phosphorus
Suffolk	Millers Pond	phosphorus
Suffolk	Beach/Island Ponds, Fishers Island	pathogens
Suffolk	Dering Harbor	pathogens
Suffolk	Tidal Tribs to Gr Peconic Bay, Northshr	pathogens
Suffolk	Mattituck (Marratooka) Pond	phosphorus
Suffolk	Mattituck (Marratooka) Pond	pathogens
Suffolk	Flanders Bay, West/Lower Sawmill	nitrogen
Suffolk	Meetinghouse/Terrys Creeks and tribs	nitrogen
Suffolk	Meetinghouse/Terrys Creeks and tribs	pathogens
Suffolk	Peconic River, Lower, and tidal tribs	nitrogen
Suffolk	Peconic River, Lower, and tidal tribs	pathogens
Suffolk	Scallop Pond	pathogens
Suffolk	Oyster Pond/Lake Munchogue	pathogens
Suffolk	Phillips Creek, Lower, and tidal tribs	pathogens
Suffolk	Quogue Canal	pathogens
Suffolk	Forge River, Lower and Cove	pathogens
Suffolk	Tidal tribs to West Moriches Bay	Nitrogen
Suffolk	Tidal tribs to West Moriches Bay	pathogens
Suffolk	Canaan Lake	silt/sediment
Suffolk	Canaan Lake	phosphorus
Suffolk	Nicoll Bay	pathogens
Suffolk	Lake Ronkonkoma	phosphorus
Suffolk	Lake Ronkonkoma	pathogens
Suffolk	Great Cove	pathogens
Tompkins	Cayuga Lake, Southern End	phosphorus
Tompkins	Cayuga Lake, Southern End	silt/sediment
Tompkins	Cayuga Lake, Southern End	pathogens
Ulster	Ashokan Reservoir	silt/sediment
Ulster	Esopus Creek, Upper, and minor tribs	silt/sediment
Warren	Lake George	silt/sediment
Warren	Tribs to L.George, Village of L George	silt/sediment
Warren	Huddle/Finkle Brooks and tribs	silt/sediment
Warren	Indian Brook and tribs	silt/sediment
Warren	Hague Brook and tribs	silt/sediment

COUNTY	WATERBODY NAME	POLLUTANT
Warren	Huddle/Finkle Brooks and tribs	silt/sediment
Warren	Indian Brook and tribs	silt/sediment
Warren	Hague Brook and tribs	silt/sediment
Washington	Lake Champlain, South Bay	phosphorus
Washington	Tribs to L.George, East Shore	silt/sediment
Washington	Cossayuna Lake	phosphorus
Wayne	Blind Sodus Bay	phosphorus
Wayne	Port Bay	phosphorus
Westchester	Saw Mill River, Lower, and tribs	floatables
Westchester	New Croton Reservoir	phosphorus
Westchester	Upper New Croton/Muscoot Reservoir	phosphorus
Westchester	Amawalk Reservoir	phosphorus
Westchester	Lake Lincolndale	phosphorus
Westchester	Peach Lake	pathogens
Westchester	Peach Lake	phosphorus
Westchester	Titicus Reservoir	phosphorus
Westchester	Cross River Reservoir	phosphorus
Westchester	Lake Meahaugh	phosphorus
Westchester	Bronx River, Upper, and tribs	pathogens
Westchester	New Rochelle Harbor	pathogens
Westchester	New Rochelle Harbor	floatables
Westchester	Long Island Sound, Westchester Co	pathogens
Westchester	Long Island Sound, Westchester Co	nitrogen
Westchester	Larchmont Harbor	pathogens
Westchester	Larchmont Harbor	floatables
Westchester	Hutchinson River, Middle, and tribs	pathogens
Westchester	Mamaroneck Harbor	pathogens
Westchester	Mamaroneck Harbor	floatables
Westchester	Mamaroneck River, Lower	silt/sediment
Westchester	Mamaroneck River, Upper, and minor	silt/sediment
Westchester	Sheldrake River and tribs	phosphorus
Westchester	Sheldrake River and tribs	silt/sediment
Westchester	Milton Harbor	pathogens
Westchester	Milton Harbor	floatables
Westchester	Blind Brook, Lower	silt/sediment
Westchester	Blind Brook, Upper, and tribs	silt/sediment
Westchester	Port Chester Harbor	pathogens
Westchester	Port Chester Harbor	floatables
Westchester	Byram River, Lower	pathogens
Wyoming	Java Lake	phosphorus
Wyoming	Silver Lake	phosphorus

APPENDIX 2 (CONTINUED)
IMPAIRED SEGMENTS AND SECONDARY POLLUTANTS OF CONCERN

COUNTY	WATERBODY	POLLUTANT
Oneida	Mohawk River, Main Stem	Copper
Westchester	Hutchinson River, Middle and tribs	Oil and Grease

APPENDIX 3: NEW YORK CITY WATERSHED EAST OF THE HUDSON RIVER WATERSHED MAP

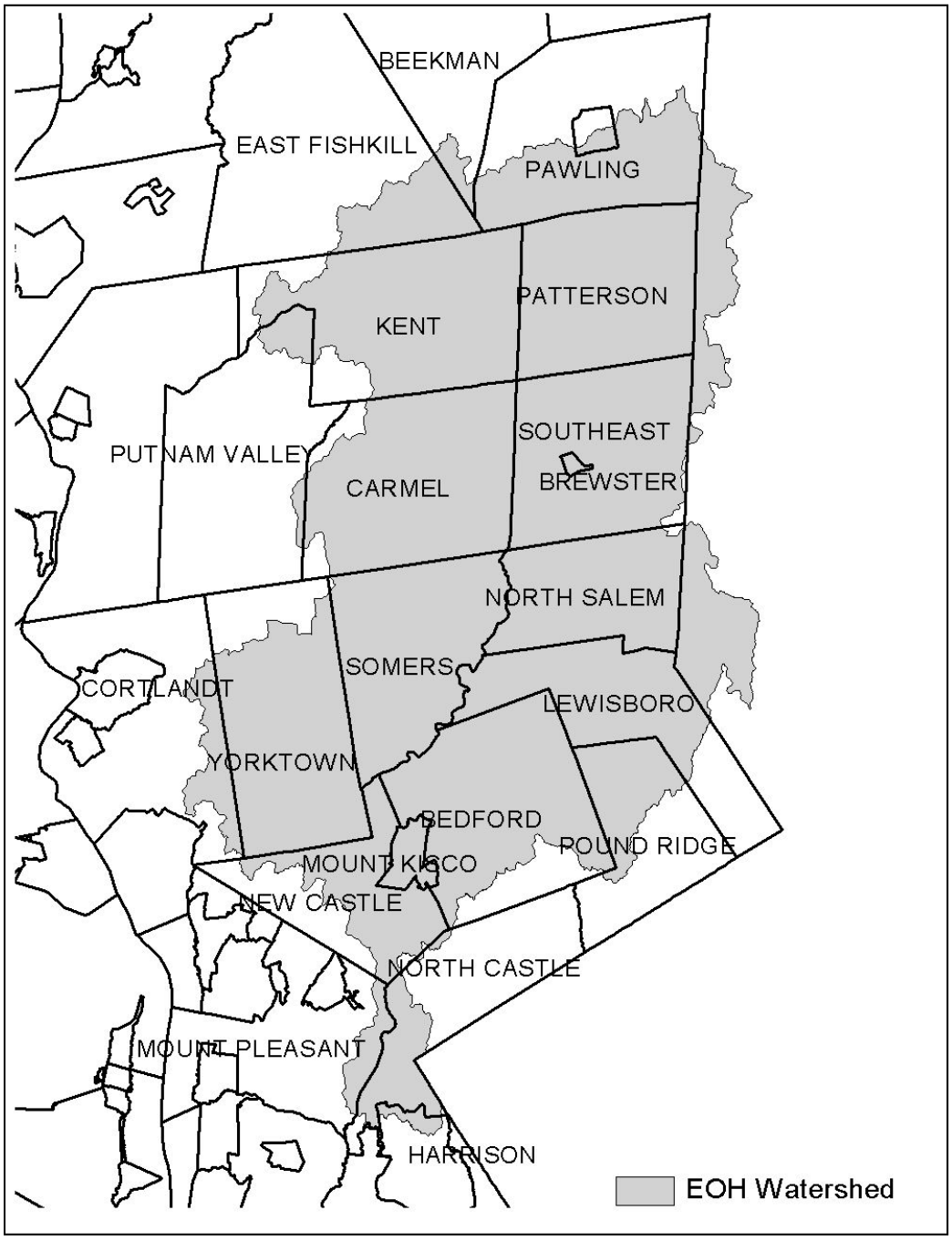


Figure 1. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 4: ONONDAGA LAKE WATERSHED MAP



Figure 2. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 5: GREENWOOD LAKE WATERSHED MAP

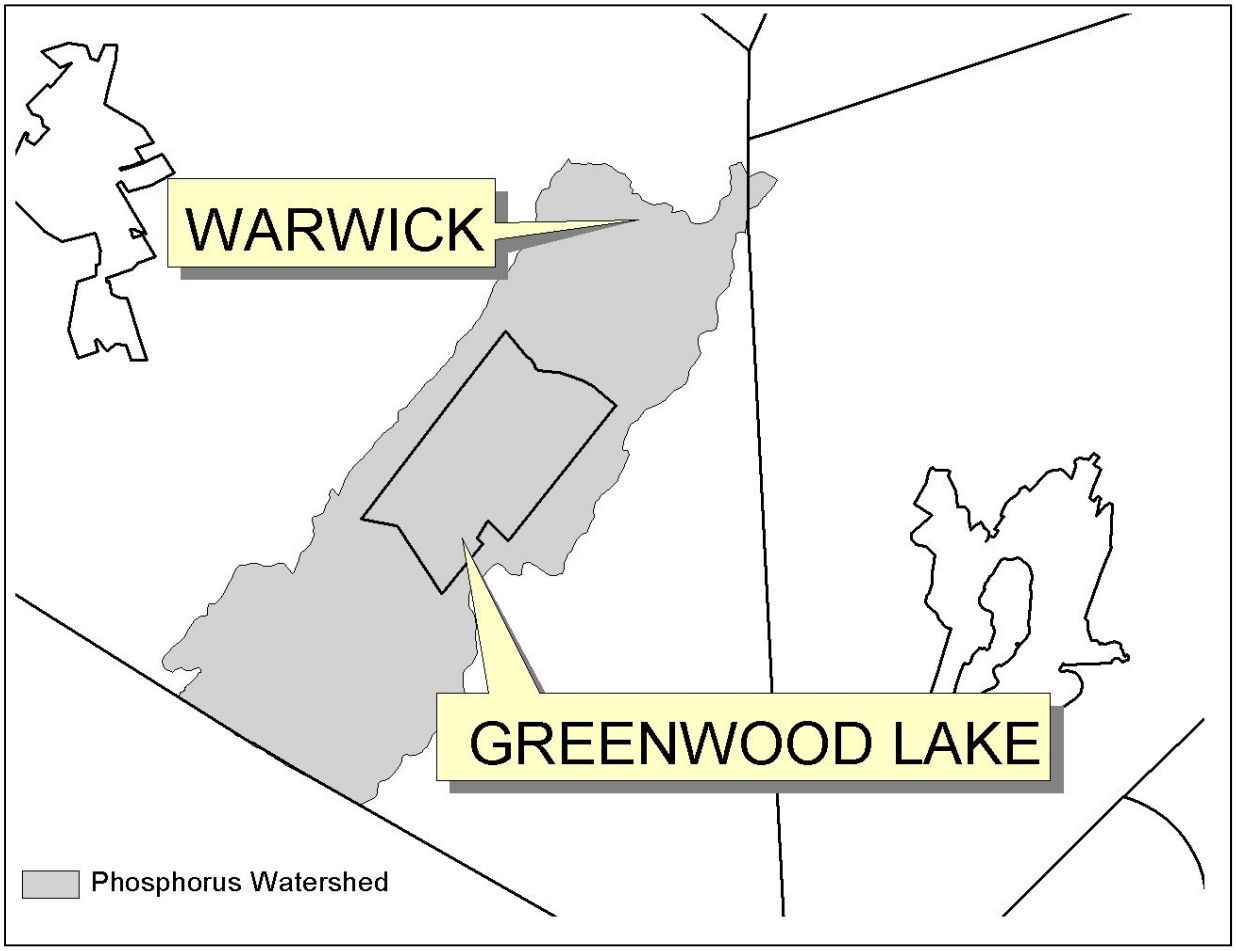


Figure 3. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 6: OYSTER BAY WATERSHED MAP

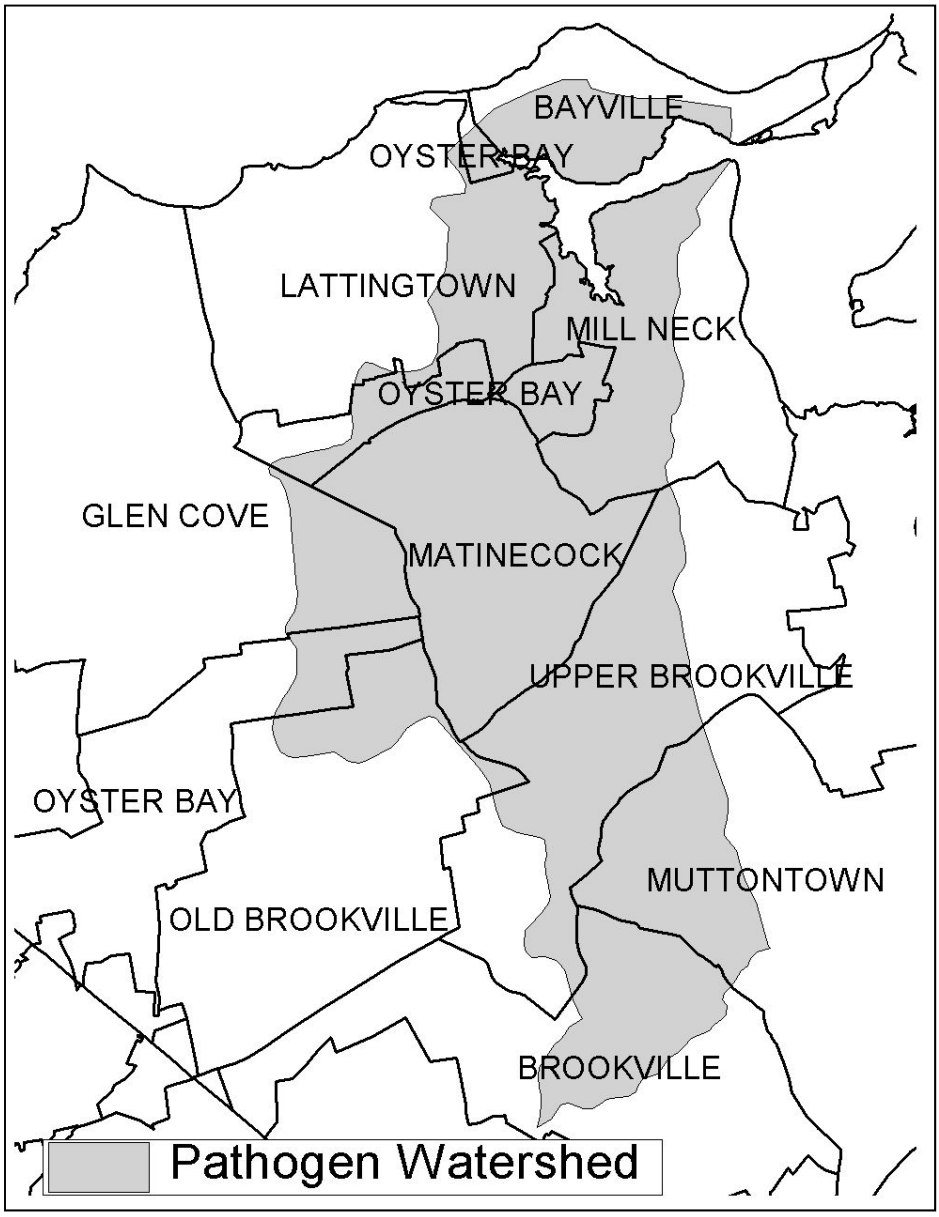


Figure 4. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 7: PECONIC ESTUARY PATHOGEN WATERSHED MAP

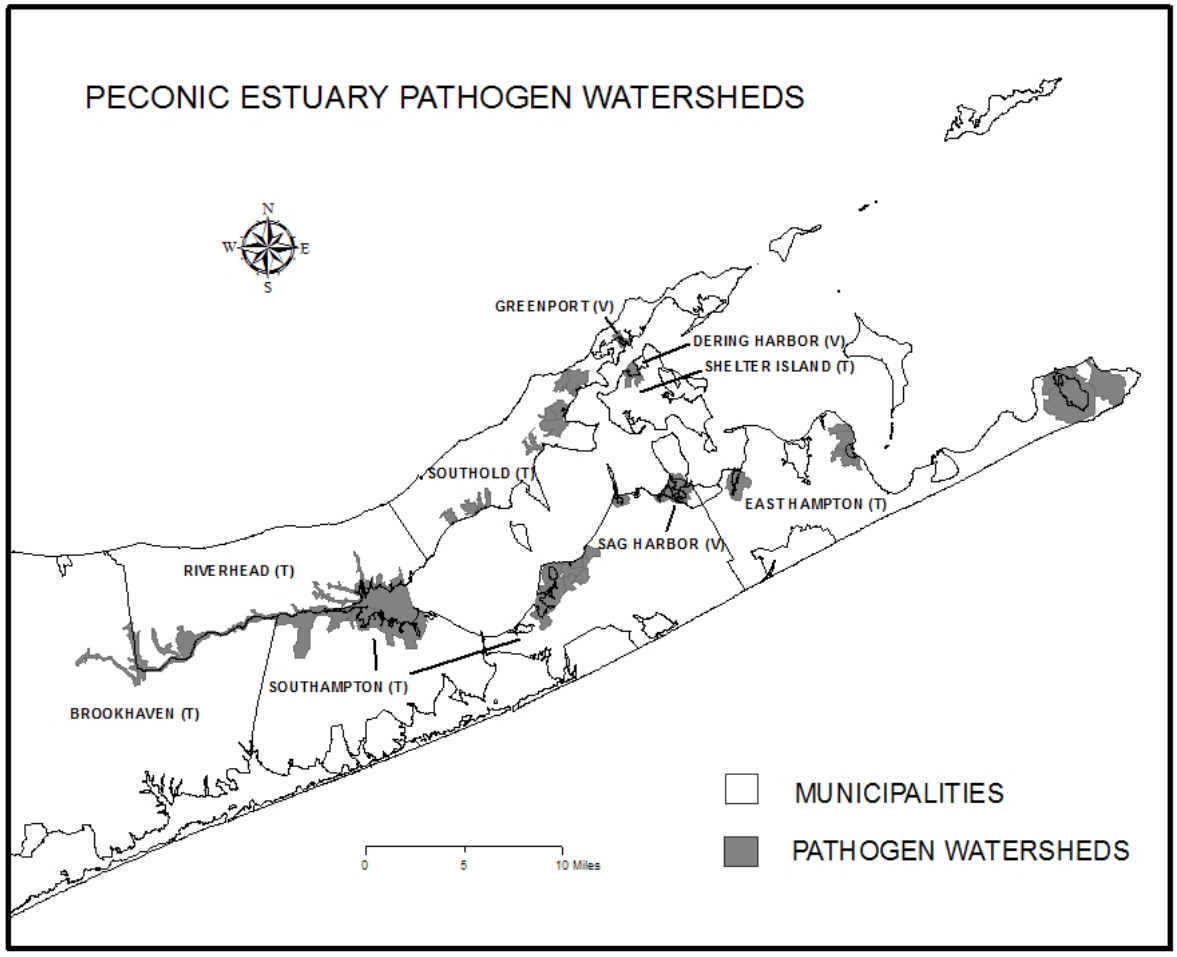


Figure 5. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 8: PECONIC ESTUARY NITROGEN WATERSHED MAP

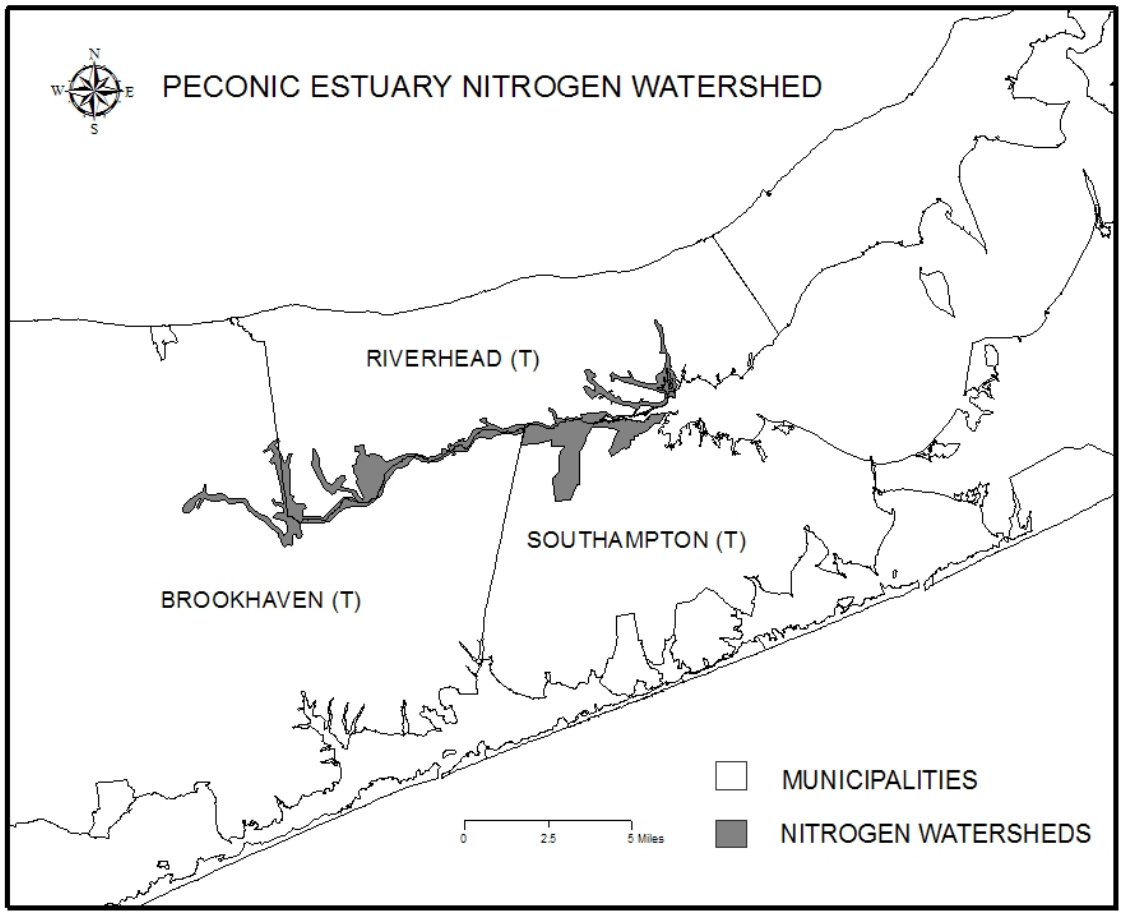


Figure 6. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 9: THE 27 LONG ISLAND SHELLFISHING IMPAIRED EMBAYMENT MAP

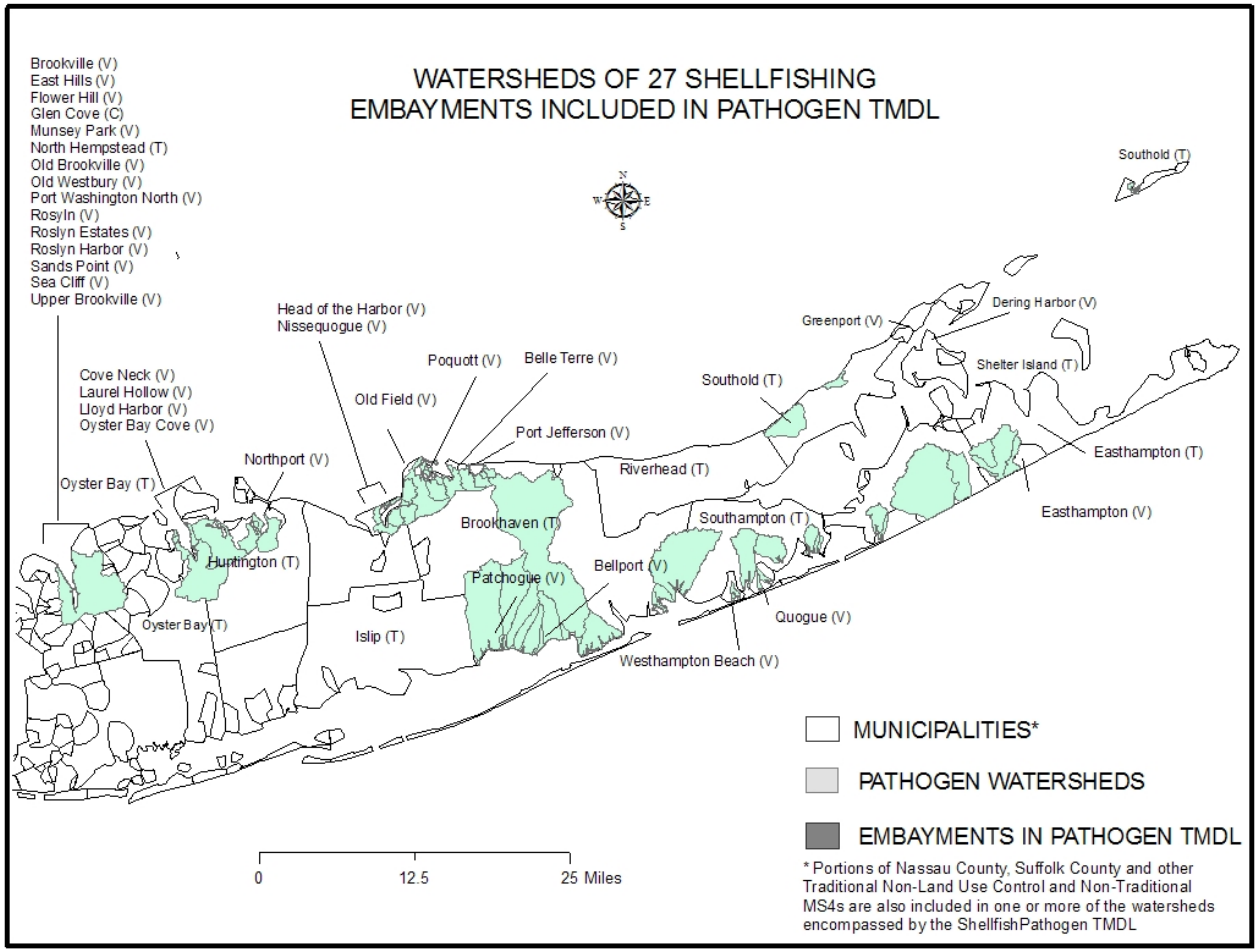


Figure 7. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX 10: LAKE OSCAWANA WATERSHED MAP

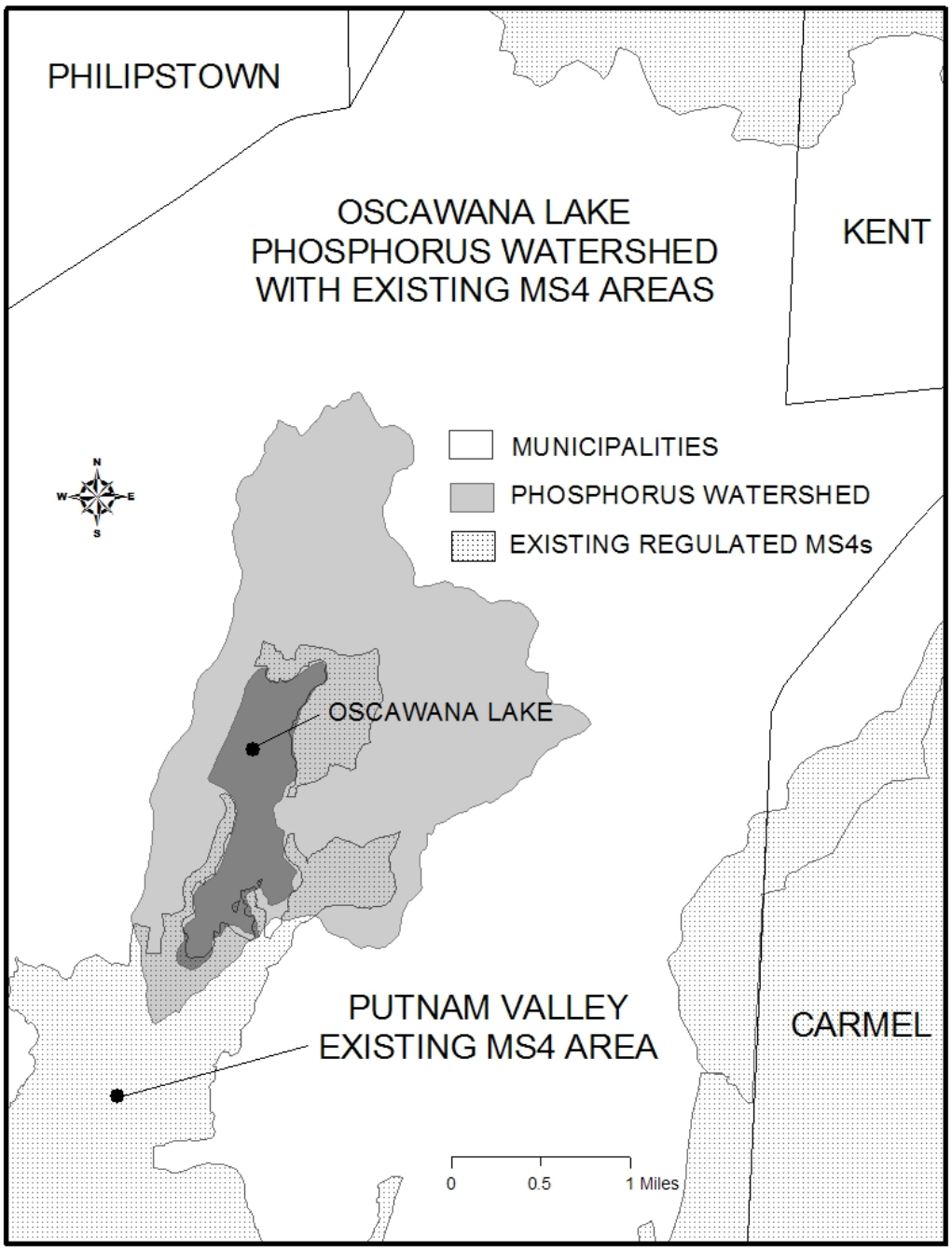


Figure 8. The requirements of watershed improvement strategies apply to the sewersheds within the shaded areas.

APPENDIX B

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities - Permit No. GP-0-10-001

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

from

CONSTRUCTION ACTIVITY

Permit No. GP-0-10-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2010 Expiration Date: January 28, 2015

William R. Adriance
Chief Permit Administrator

William R. Adriance — January 28, 2010
Authorized Signature — Date

Address: NYS DEC
Div. Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York's *State Pollutant Discharge Elimination System ("SPDES")* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law ("ECL").*

This general permit ("permit") is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation ("the Department") regional office (see Appendix G).They are also available on the Department's website at:

http://www.dec.ny.gov/

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to Article 17-0505 of the ECL, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. They cannot wait until there is an actual *discharge* from the construction site to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

FROM CONSTRUCTION ACTIVITIES

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Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application - This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State.*

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

B. Maintaining Water Quality - It shall be a violation of this permit and the *ECL* for any *discharge* to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

C. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph D. of this Part.

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater discharges from *construction activities*.

(Part I. C)

3. Notwithstanding paragraphs C.1 and C.2 above, the following non-stormwater *discharges* may be authorized by this permit: discharges from fire fighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated groundwater or spring water; uncontaminated discharges from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who discharge as noted in this paragraph, and with the exception of flows from fire fighting activities, these discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with water quality standards in Part I.B.

D. <u>Activities Which Are Ineligible for Coverage Under This General Permit</u> - All of the following are **<u>not</u>** authorized by this permit:

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection C.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII, subparagraph K of this permit;

4. *Discharges* from *construction activities* that adversely affect a listed, or proposed to be listed, endangered or threatened species, or its critical habitat;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects that:

    a. are tributary to waters of the state classified as AA or AA-s; and

(Part I. D. 6)

b. disturb one or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.

7. *Construction activities* for linear transportation projects and linear utility projects that:
   a. are tributary to waters of the state classified as AA or AA-s; and

   b. disturb two or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.

8. *Construction activities* that adversely affect a property that is listed or is eligible for listing on the State or National Register of Historic Places (Note: includes Archeological sites), unless there are written agreements in place with the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) or other governmental agencies to mitigate the effects, or there are local land use approvals evidencing the same.

Part II. OBTAINING PERMIT COVERAGE

A. Notice of Intent (NOI) Submittal

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a *regulated, traditional land use control MS4* must first develop a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the address below in order to be authorized to *discharge* under this permit. The NOI form shall be one which is associated with this permit, signed in accordance with Part VII.H. of this permit.

   NOTICE OF INTENT
   NYS DEC, Bureau of Water Permits
   625 Broadway, 4th Floor
   Albany, New York 12233-3505

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first develop a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person, and then submit that form along with the NOI to the address referenced under "Notice of Intent (NOI) Submittal".

(Part II. A.2)

This requirement does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (Change of Owner or Operator).

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

B. <u>Permit Authorization</u>

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied <u>all</u> of the following criteria:

    a. project review pursuant to the State Environmental Quality Review Act (SEQRA) have been satisfied, when SEQRA is applicable,

    b. where required, all necessary Department permits subject to the *Uniform Procedures Act (UPA)* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Regional Office in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

    c. the final SWPPP has been prepared, and

    d. an NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

(Part II. B. 3)

a. For *construction activities* that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4*:

i. Five (5) business days from the date the Department receives a complete NOI for *construction activities* with a SWPPP that has been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 and/or 3, or

ii. Sixty (60) business days from the date the Department receives a complete NOI for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 or 3.

b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:

i. Five (5) business days from the date the Department receives a complete NOI and signed "MS4 SWPPP Acceptance" form,

4. The Department may suspend or deny an *owner's or operator's* coverage under this permit if the Department determines that the SWPPP does not meet the permit requirements.

5. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department.

C. <u>General Requirements For Owners or Operators With Permit Coverage</u>

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (NOT) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-10-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form and inspection reports at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department.

(Part II. C. 2)

The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

    a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

    b. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

    c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

    d. The *owner or operator* shall install any additional site specific practices needed to protect water quality.

    e. The *owner or operator* shall include the requirements above in their SWPPP.

4. The Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements.

(Part II. C)

5. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4,* the *owner or operator* shall notify the *MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *MS4* prior to commencing construction of the post-construction stormwater management practice.

D. Permit Coverage for Discharges Authorized Under GP-0-08-001

1. Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-08-001), a*n owner or operator* of *construction activity* with coverage under GP-0-08-001, as of the effective date of GP-0-10-001, shall be authorized to *discharge* in accordance with GP-0-10-001 unless otherwise notified by the Department.

E. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.A.1.. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

   Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*.

(Part III. A)

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.

4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP:

    a. whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater *discharges* from the site;

    b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants; and

    c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority.

5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit.

6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP.

(Part III. A. 6)

The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor.* The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

> "I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. "

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

8. The SWPPP must include documentation supporting the determination of permit eligibility with regard to Part I.D.8. (Historic Places or Archeological Resource). At a minimum, the supporting documentation shall include the following:

(Part III. A. 8)

a. Information on whether the stormwater discharge or *construction activities* would have an effect on a property (historic or archeological resource) that is listed or eligible for listing on the State or National Register of Historic Places;

b. Results of historic resources screening determinations conducted. Information regarding the location of historic places listed, or eligible for listing, on the State or National Registers of Historic Places and areas of archeological sensitivity that may indicate the need for a survey can be obtained online by viewing the New York State Office of Parks, Recreation and Historic Places (OPRHP) online resources located on their web site at: http://nysparks.state.ny.us/shpo/online-tools/ (using The Geographic Information System for Archeology and National Register). OPRHP can also be contacted at: NYS OPRHP, State Historic Preservation Office, Peebles Island Resources Center, P.O. Box 189, Waterford, NY 12188-0189, phone: 518-237-8643;

c. A description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the State or National Register of Historic Places. If the *owner or operator* fails to describe and implement such measures, the stormwater *discharge* is ineligible for coverage under this permit; and

d. Where adverse effects may occur, any written agreements in place with OPRHP or other governmental agency to mitigate those effects, or local land use approvals evidencing the same.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control. Where erosion and sediment control practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

    a. Background information about the scope of the project, including the location, type and size of project;

(Part III. B. 1)

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s), wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each construction activity that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of final stabilization;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

(Part III. B. 1)

i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6., to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule shall be in accordance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the stormwater *discharges*;

k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the construction site; and

l. Identification of any elements of the design that are not in conformance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards.

2. Post-construction stormwater management practice component - All construction projects identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). If the Design Manual is revised during the term of this permit, an *owner or operator* must begin using the revised version of the Design Manual to prepare their SWPPP six (6) months from the final revision date of the Design Manual.

   Where post-construction stormwater management practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard.

   At a minimum, the post-construction stormwater management practice component of the SWPPP shall include the following:

   a. Identification of all post-construction stormwater management practices to be constructed as part of the project;

(Part III. B. 2)

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. The dimensions, material specifications and installation details for each post-construction stormwater management practice;

d. Identification of any elements of the design that are not in conformance with the Design Manual. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards;

e. A hydrologic and hydraulic analysis for all structural components of the stormwater management control system;

f. A detailed summary (including calculations) of the sizing criteria that was used to design all post-construction stormwater management practices. At a minimum, the summary shall address the required design criteria from the applicable chapter of the Design Manual; including the identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required based on the design criteria or waiver criteria included in the Design Manual; and

g. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.g. above.

(Part III. C)

C. Required SWPPP Components by Project Type - Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices and all post-construction stormwater management practices identified in the SWPPP are maintained in effective operating condition at all times.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Owner or Operator Maintenance Inspection Requirements

1. The *owner or operator* shall inspect, in accordance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, the erosion and sediment controls identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *owner or operator* can stop conducting the maintenance inspections. The *owner or operator* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

(Part IV. C)

C. <u>Qualified Inspector Inspection Requirements</u> - The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- Licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- Someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, <u>with the exception of</u>:

    a. the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;

    b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;

    c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

    d. construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

    a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

(Part IV. C. 2)

b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the MS4 (provided the MS4 is not the *owner or operator* of the construction activity) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the MS4 (provided the MS4 is not the *owner or operator* of the construction activity). in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed*;* and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.A.1..

(Part IV. C. 3)

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of discharge to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of discharge from the construction site.

4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

    a. Date and time of inspection;

    b. Name and title of person(s) performing inspection;

    c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;

    d. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;

    e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;

    f. Identification of all erosion and sediment control practices that need repair or maintenance;

    g. Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

    h. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s); and

k. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector.* Pursuant to Part II.C.2., the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.A.1. The NOT form shall be one which is associated with this general permit, signed in accordance with Part VII.H.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

(Part V. A. 2)

a. Total project completion - All construction activity identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT, certify that all disturbed areas have achieved *final stabilization;* and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall also have the MS4 sign the "MS4 Acceptance" statement on the NOT. The *owner or operator* shall have the principal executive officer, ranking elected official, or duly authorized representative from the *regulated, traditional land use control MS4*, sign the "MS4 Acceptance" statement. The MS4 official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The MS4 can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector's* final site inspection certification(s) required in Part V.3.

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

(Part V. A. 5)

a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),

c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has modified their deed of record to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan,

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION OF RECORDS

A. Record Retention - The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the site achieves *final stabilization*. This period may be extended by the Department, in its sole discretion, at any time upon written notification.

B. Addresses - With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate Department Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply - The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied.

(Part VII. A)

The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

B. <u>Continuation of the Expired General Permit</u> - This permit expires five (5) years from the effective date. However, coverage may be obtained under the expired general permit, which will continue in force and effect, until a new general permit is issued. Unless otherwise notified by the Department in writing, an *owner or operator* seeking authorization under the new general permit must submit a new NOI in accordance with the terms of such new general permit.

C. <u>Enforcement</u> - Failure of the *owner or operator,* its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to $37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. <u>Need to Halt or Reduce Activity Not a Defense</u> - It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. <u>Duty to Mitigate</u> - The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to minimize or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. <u>Duty to Provide Information</u> - The *owner or operator* shall make available to the Department for review and copying or furnish to the Department within five (5) business days of receipt of a Department request for such information, any information requested for the purpose of determining compliance with this permit. This can include, but is not limited to, the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, executed maintenance agreement, and inspection reports. Failure to provide information requested by the Department within the request timeframe shall be a violation of this permit.

The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review the NOI, SWPPP or inspection reports. Copying of documents will be done at the requester's expense.

G. <u>Other Information</u> - When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any other report, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s)

changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or impervious area), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. <u>Signatory Requirements</u>

1. All NOIs and NOTs shall be signed as follows:

    a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

        i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

        ii. the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

    b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

    c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

        i. the chief executive officer of the agency, or

(Part VII. H. 1. c)

ii. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Part VII.H.1.;

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

    c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.

3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.

4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

    It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. <u>Property Rights</u> - The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity.*

J. <u>Severability</u> - The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

(Part VII. K)
K. <u>Denial of Coverage Under This Permit</u>

1. At its sole discretion, the Department may require any *owner or operator* authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from *owner or operator* receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Regional Water Engineer, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. Any *owner or operator* authorized by this permit may request to be excluded from the coverage under this permit by applying for an individual permit or another general permit. In such cases, the *owner or operator* shall submit an individual application or an alternative general permit application in accordance with the requirements of this general permit, 40 CFR 122.26(c)(1)(ii) and 6 NYCRR Part 621, with reasons supporting the request, to the Department at the address for the appropriate Department Office (see addresses in Appendix F).The request may be granted by issuance of an individual permit or another general permit at the discretion of the Department.

3. When an individual SPDES permit is issued to a discharger authorized to discharge under a general SPDES permit for the same discharge(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. <u>Proper Operation and Maintenance</u> - The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. <u>Inspection and Entry</u> - The *owner or operator* shall allow the Department or an authorized representative of EPA, the State, or, in the case of a construction site which discharges through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

(Part VII. M)

1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions - At the Department's sole discretion, this permit may, at any time, be modified, suspended, revoked, or renewed. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions - Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports – Article 17 of the ECL provides for a civil penalty of $37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and/or imprisonment for falsifying forms and reports required by this permit.

R. Other Permits – Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A

Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "Construction Activity(ies)" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or point source.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in

which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

i. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*
ii. Designed or used for collecting or conveying stormwater;
iii. Which is not a *combined sewer*; and
iv. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from construction activity.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the construction activity is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in Parts 700 et seq of this Title.

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

Routine Maintenance Activity - means construction activity that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Stream bank restoration projects (does not include the placement of spoil material),
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that makes the transition between the road shoulder and the ditch or embankment,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or embankment,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* will be responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B

Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Bike paths and trails
- Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that *alter hydrology from pre to post development* conditions
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of less than five acres and construction activities that include the construction or reconstruction of impervious area

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

- All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project , wind-power project, cell tower project, oil or gas well drilling project or other linear utility project
- All other construction activities that include the construction or reconstruction of *impervious area* and *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed – Figure 4

Figure 1 - New York City Watershed East of the Hudson

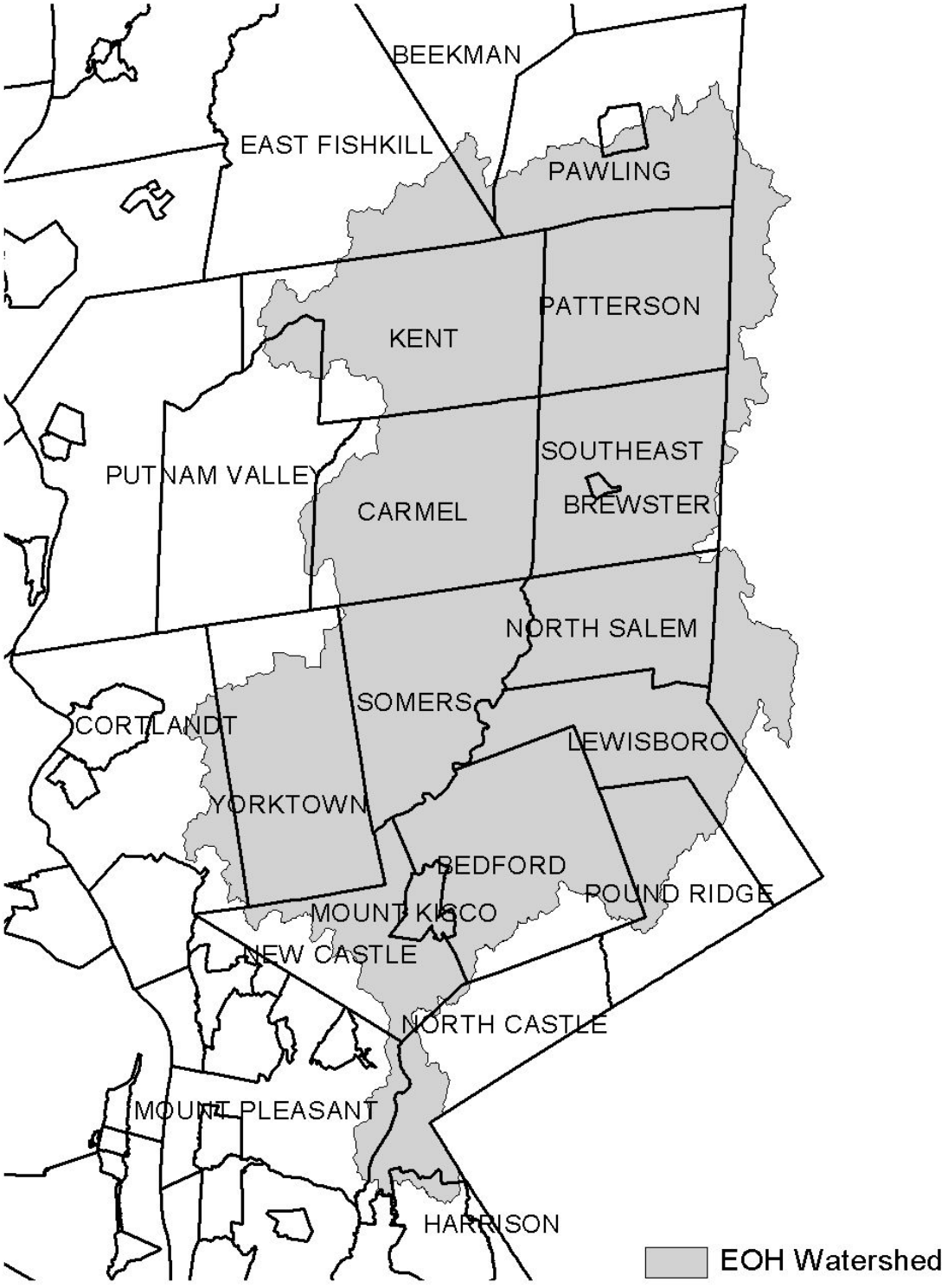


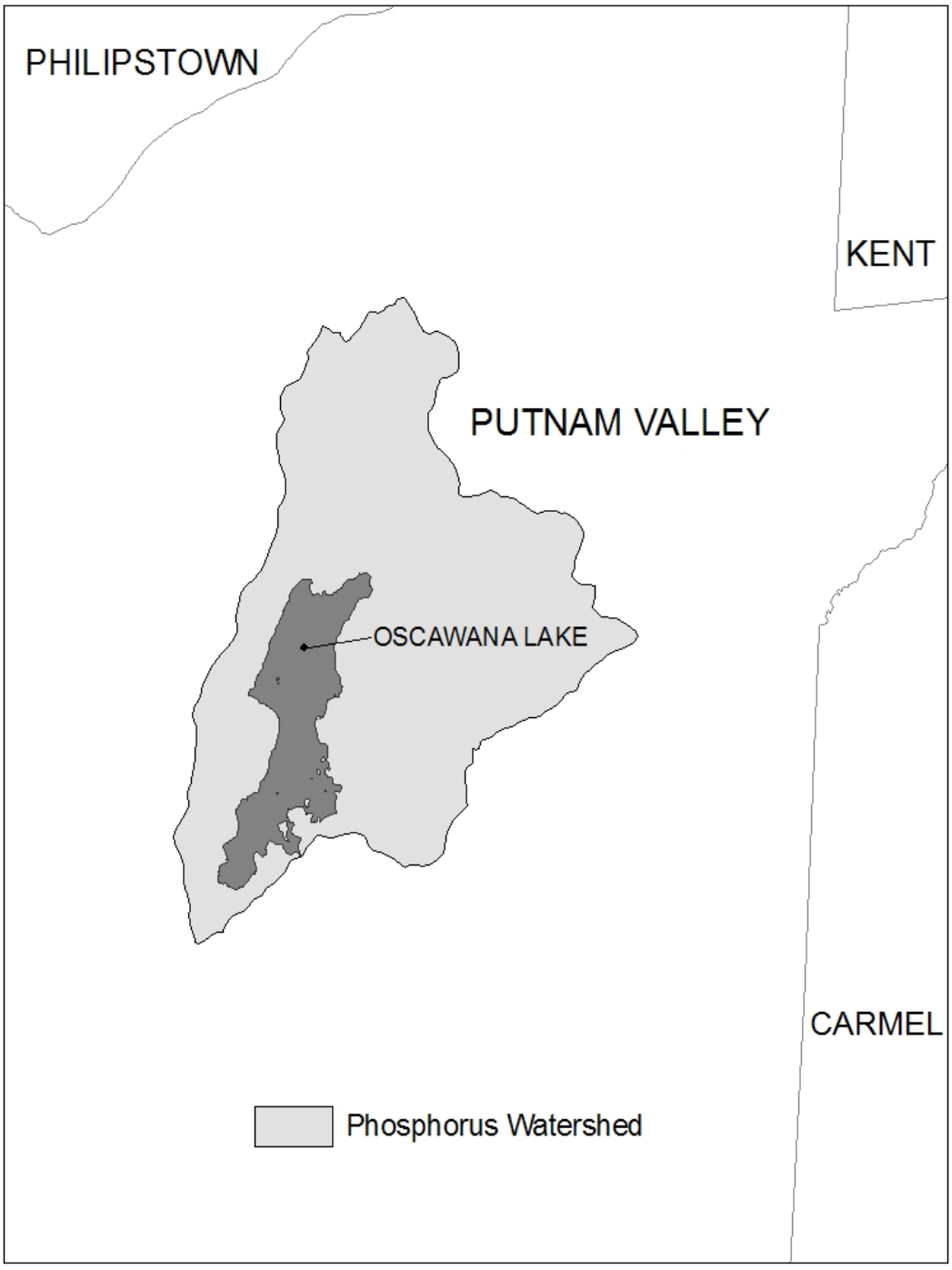
Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed



Figure 4 - Oscawana Lake Watershed



APPENDIX D

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivision construction activities that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond
Albany	Basic Creek Reservoir
Bronx	Van Cortlandt Lake
Broome	Whitney Point Lake/Reservoir
Broome	Beaver Lake
Broome	White Birch Lake
Chautauqua	Chautauqua Lake, North
Chautauqua	Chautauqua Lake, South
Chautauqua	Bear Lake
Chautauqua	Chadakoin River and tribs
Chautauqua	Lower Cassadaga Lake
Chautauqua	Middle Cassadaga Lake
Chautauqua	Findley Lake
Clinton	Great Chazy River, Lower, Main Stem
Columbia	Kinderhook Lake
Columbia	Robinson Pond
Dutchess	Hillside Lake
Dutchess	Wappinger Lakes
Dutchess	Fall Kill and tribs
Dutchess	Rudd Pond
Erie	Rush Creek and tribs
Erie	Ellicott Creek, Lower, and tribs
Erie	Beeman Creek and tribs
Erie	Murder Creek, Lower, and tribs
Erie	South Branch Smoke Cr, Lower, and tribs
Erie	Little Sister Creek, Lower, and tribs
Essex	Lake George (primary county listed as Warren)
Genesee	Black Creek, Upper, and minor tribs
Genesee	Tonawanda Creek, Middle, Main Stem
Genesee	Tonawanda Creek, Upper, and minor tribs
Genesee	Little Tonawanda Creek, Lower, and tribs
Genesee	Oak Orchard Creek, Upper, and tribs
Genesee	Bowen Brook and tribs
Genesee	Bigelow Creek and tribs
Greene	Schoharie Reservoir
Greene	Sleepy Hollow Lake
Herkimer	Steele Creek tribs
Kings	Hendrix Creek
Lewis	Mill Creek/South Branch and tribs
Livingston	Conesus Lake
Livingston	Jaycox Creek and tribs
Livingston	Mill Creek and minor tribs
Monroe	Genesee River, Lower, Main Stem
Monroe	Genesee River, Middle, Main Stem
Monroe	Black Creek, Lower, and minor tribs
Monroe	Buck Pond
Monroe	Long Pond
Monroe	Cranberry Pond
Monroe	Mill Creek and tribs
Monroe	Shipbuilders Creek and tribs
Monroe	Minor tribs to Irondequoit Bay
Monroe	Thomas Creek/White Brook and tribs
Nassau	Glen Cove Creek, Lower, and tribs
Nassau	LI Tribs (fresh) to East Bay
Nassau	East Meadow Brook, Upper, and tribs
Nassau	Hempstead Bay
Nassau	Hempstead Lake
Nassau	Grant Park Pond
Niagara	Bergholtz Creek and tribs
Oneida	Ballou, Nail Creeks
Onondaga	Ley Creek and tribs
Onondaga	Onondaga Creek, Lower and tribs
Onondaga	Onondaga creek, Middle and tribs
Onondaga	Onondaga Creek, Upper, and minor tribs
Onondaga	Harbor Brook, Lower, and tribs
Onondaga	Ninemile Creek, Lower, and tribs
Onondaga	Minor tribs to Onondaga Lake
Ontario	Honeoye Lake
Ontario	Hemlock Lake Outlet and minor tribs
Ontario	Great Brook and minor tribs
Oswego	Lake Neatahwanta
Putnam	Oscawana Lake
Putnam	Lake Carmel
Queens	Jamaica Bay, Eastern, and tribs (Queens)
Queens	Bergen Basin
Queens	Shellbank Basin
Rensselaer	Snyders Lake
Richmond	Grasmere, Arbutus and Wolfes Lakes
Saratoga	Dwaas Kill and tribs
Saratoga	Tribs to Lake Lonely
Saratoga	Lake Lonely
Saratoga	Schuyler Creek and tribs
Schenectady	Collins Lake

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Schoharie	Engleville Pond		
Schoharie	Summit Lake		
St. Lawrence	Black Lake Outlet/Black Lake		
Steuben	Lake Salubria		
Steuben	Smith Pond		
Suffolk	Millers Pond		
Suffolk	Mattituck (Marratooka) Pond		
Suffolk	Tidal tribs to West Moriches Bay		
Suffolk	Canaan Lake		
Suffolk	Lake Ronkonkoma		
Tompkins	Cayuga Lake, Southern End		
Tompkins	Owasco Inlet, Upper, and tribs		
Ulster	Ashokan Reservoir		
Ulster	Esopus Creek, Upper, and minor tribs		
Warren	Lake George		
Warren	Tribs to L.George, Village of L George		
Warren	Huddle/Finkle Brooks and tribs		
Warren	Indian Brook and tribs		
Warren	Hague Brook and tribs		
Washington	Tribs to L.George, East Shore of Lake George		
Washington	Cossayuna Lake		
Wayne	Port Bay		
Wayne	Marbletown Creek and tribs		
Westchester	Peach Lake		
Westchester	Mamaroneck River, Lower		
Westchester	Mamaroneck River, Upper, and minor tribs		
Westchester	Sheldrake River and tribs		
Westchester	Blind Brook, Lower		
Westchester	Blind Brook, Upper, and tribs		
Westchester	Lake Lincolndale		
Westchester	Lake Meahaugh		
Wyoming	Java Lake		
Wyoming	Silver Lake		

Note: The list above identifies those waters from the final New York State "2008 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated May 26, 2008, that are impaired by silt, sediment or nutrients.

APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

Region	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS	DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD, PO BOX 220 WARRENSBURG, NY 12885-0220 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

APPENDIX C

Town Educational Pamphlets and Posters

BMP Summary Sheet	
MS4 Name:	Town of Riverhead
Minimum Control Measure:	2 - PUBLIC PARTICIPATION/INVOLVEMENT
Unique BMP Identification Number:	2
BMP Title	Solicit Public Input and Opinion on the Adequacy of the SWMP

Permit Description:
You must solicit public input and opinion on the adequacy of the Stormwater Management Program Plan (SWMP), including input from the public meeting each year prior to submittal of the annual report the NYSDEC

Location(s) in SWMP of detailed information related to this BMP:
Section 4.0

Measurable Goals:	2010	2011	2012	2013
Number who attend the meeting				
Number of comments or statements received regarding the SWMP				

Timeline/Implementation Schedule:
Provide one annual public meeting prior to submittal of the Annual Report

Specific Components and Notes:

1. Provide a reasonable opportunity to make oral statements
2. Provide a comment period that includes reasonable opportunity to comment on the SWMP
3. Consider timely, relevant written materials that interested Persons submit concerning the SWMP
4. Establish a process or procedure for presentations. Grouping of comments timing, format of materials and similar rules can be established as needed to ensure full and fair consideration of all views

Responsible Party for this BMP:

Department:	Engineering/Stormwater Management Office
Name:	Christine Fetten/Drew Dillingham
Phone:	631-727-3200
E-Mail:	fetten@riverheadli.com/dillingham@riverheadli.com

BMP SUMMARY SHEET	
MS4 NAME:	Town of Riverhead
Minimum Control Measure:	2- PUBLIC PARTICIPATION/INVOLVEMENT
Unique BMP Identification Number:	
BMP Title	STORM DRAIN LABELING PROGRAM

BMP Description

The labeling of storm sewers will provide the pbulic with the awareness that materials which enter the storm drain system is discharged directly into waters within the Town of Riverhead. The goal is to encourage the public to keep storm drains clear of debris and to monitor what is entering local waterways through storm water.Materials will be made available for volunteers to participate in Storm Drain Labeling. Volunteer groups would be able to pick up supplies and equipment free of charge

Location(s) in SWMP of detailed information relating to this BMP:

Measurable Goals:	2011	2012	2013	2014
1 Number of volunteers or volunteer groups who pick up the storm drain labeling kits each year				
2 Track areas of the Town marked by the Volunteer Groups				
3 Check status of storm drain labeling sites annually to see if the areas need to be redone				

Timeline/Implementation Schedule:

Evaluate the kit contents and order new supplies as needed each spring

Specific Components and Notes

Post an article on the Town's web site regarding the volunteer opportunity and the availability of the kits

Responsible Party for this BMP	
Department:	Engineering Department, SMO
Name:	Christine Fetten, Drew Dillingham
Phone:	631-727-3200-201
E-mail:	fetten@rivehreadli.com/dillingham@riverheadli.com

BMP SUMMARY SHEET	
MS4 Name:	Town of Riverhead
Minimum Control Measure:	2- PUBLIC PARTICIPATION/INVOLVEMENT
Unique BMP Identification Number	
BMP Title:	OPEN SPACE CLEAN UP

BMP Description:

Provide support for an Annual Open Space Clean Up Event in which volunteer groups work to clean up areas of illegal dumping for open space within the Town. The event is typically held in April and is a good tool for increasing awareness on the amount of types of materials which are dumped in our open spaces and the potential impacts they may have on water quality. The success of the program will be evaluated each year nd the need to continue the program will be determined based on the results. Other items provided by the Engineering Department will include posting of pet waste disposal requirements where needed in the Open Space System and provision of trees at an Annual Arbor Day event.

Location(s) in SWMP of detailed information relating to this BMP:

	Measurable Goals	2011	2012	2013	2014
1	Number of volunteers or volunteer groups who participate in the Open Space Clean Up each year				

Timeline/Implementation Schedule

1	Hold an Open Space Clean Up event annually
2	Evaluate space needs for pet waste disposal requirements signs annually.

Specific Components and Notes.

1	Post an article on the Town web site prior to the event regarding the volunteer opportunity.
2	Develop guidelines for volunteers to use on how to conduct the clean up.
3	Provide equipment for the clean up event
4	Provide signage for pet waste disposal in Open Space.
5	Provide trees for distribution at the Arbor Day Celebration

Responsible Party for this BMP	
Department:	
Name:	
Phone:	
E-Mail:	

Your dogs do can find it's way all the way to our waterways...



Thanks, on behalf of the Town of Riverhead

When you're fertilizing the lawn,

remember - you're not just

fertilizing the lawn.



You fertilize the lawn. Then it rains… The rain washes the fertilizer along the curb, into the storm drain, and directly into our creeks, bays, and the Long Island Sound. This causes algae to grow, beaches to be temporarily closed, and uses up oxygen necessary for the survival of sea life such as fish and shellfish. So if you fertilize, please follow manufacturers directions and use sparingly.

Thank you, on behalf of the Town of Riverhead.

Questions?
Contact the Engineering Dept.—Stormwater Management
727-3200 Ext. 201

When you're washing your car in the driveway, remember - you're not just washing your car in the driveway.



All the soap, scum, and oily grit runs along the curb. Then into the storm drain and directly into our creeks, the Peconic, and the Long Island Sound. This causes pollution, which is unhealthy to our beaches, fish, and shellfish. So how can you avoid all this? Easy… Wash your car on grass or gravel instead of the street. Or better yet, take it to a car wash where the water is treated and recycled.

Thank you, on behalf of the Town of Riverhead

Questions?
Contact the Engineering Dept.—Stormwater Management
727-3200 Ext. 201

When your pet goes on the lawn,

remember - It doesn't just

go on the lawn.



When our pets leave those little surprises, rain washes all that pet waste and bacteria into our storm drains, which then pollutes our beaches and creeks. So what do you do? Simple. Dispose of it properly by either flushing it down the toilet, putting it in a baggy for the garbage, or burying it in the back yard. Then that little surprise gets treated like it should.

Thank you, on behalf of the Town of Riverhead.

Questions?
Contact the Engineering Dept.—Stormwater Management
727-3200 Ext. 201

When your car's leaking oil on the street, remember - its not just leaking oil on the street.



Leaking oil goes from car to street. It's washed from the street to the storm drains, and from the drains into our creeks, bays, and the Long Island Sound. Now imagine the number of cars in our area, especially at this time of year, and imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.

Thank you, on behalf of the Town of Riverhead.

Questions?
Contact the Engineering Dept.—Stormwater Management
727-3200 Ext. 201

Phase II

Littering and Floatables Program

Long Island Peconic Estuary Program Member



Safely dispose of your cigarette butts and litter into an appropriate receptacle! Cigarette butts are litter too!

The Town of Riverhead Storm Drain System

To address the accumulation of stormwater on streets after it rains, storm drainage systems are constructed throughout the Town. Many older systems lead to tributary streams or directly to the Peconic Bay, River or the Long Island Sound. Litter dropped on roadways may enter the storm drain system and pollute our surface waters causing beach closures. Litter and floatable wastes directly impact the aesthetic value of our waters. *Be a good neighbor; protect our water resources by disposing of trash into its proper receptacle*



DID YOU KNOW

- Cigarette butts can leach chemicals such as cadmium, lead and arsenic within an hour of contact with surface waters.
- Chapter 98 of Town code prohibits littering and imposes penalties for violators.
- Cigarette butts tend to accumulate in our waterways and beaches creating unsightly conditions.
- Just because you cannot see surface waters does not mean your litter won't pollute. Storm drains are connected to miles of underground pipes with many discharges to surface waters

The Town of Riverhead Waterbodies

The Town of Riverhead has several impaired (unhealthy) water bodies within its boundaries

1. Flanders Bay, East/Center and its tributaries
2. Flanders Bay, West/Lower Sawmill Creek
3. Meetinghouse/Terrys Creeks and tributaries
4. Peconic River, Lower and tidal tributaries
5. Reeves Ban and tidal tributaries

Additional Waterbodies within the Town of Riverhead include:

Deep Pond	Hallocks Pond	Grassy Pond
Duck Ponds	Merritts Pond	Peconic Bay



How Can You Help?

- If you are a smoker, please dispose of your cigarette butts in an out-door cigarette receptacle, pocket ashtray or automobile ashtray.
- Lead by example and throw out trash, like fast food containers, in receptacles. Treat the surrounding environment like you would treat your own property.

Town of Riverhead—Engineering Department
200 Howell Avenue
Riverhead, NY 11901 (631) 727-3200-ext. 282

Coverage under the permit will require the applicant to perform weekly inspection of the site's sediment and erosion controls, perform BMP's for vehicle maintenance, concrete wash out activities, maintaining a minimal dust environment, and performing inspections after a significant rain event of more than 1/2" in a 24 -hour period.

Town of Riverhead Chapter 110 and NYSDEC Permit GP-0-08-001 describes the procedures for site inspections and enforcement of erosion and sediment control measures, including soil stockpile treatment, vehicle and product maintenance, emergency procedures and contacts. The key to good housekeeping is developing an efficient schedule with sediment and erosion control measures as the first installed item to protect slopes and to prevent construction site debris from being tracked onto the municipal roads, thereby, contaminating the Municipal Storm Water Sewer System (MS4). By May 1, 2010, construction site operators must be trained in erosion and sediment control procedures through the NYSDEC or other approved agency, before they are approved for work within the Town of Riverhead.

The Storm Water Management Office would like to invite applicants to feel free to stop by, call or write with any issues, and concerns. Our goal is to ensure developers pro-actively consider storm water issues at the conceptual design stage. As well as, to holistically consider the site, its topography, and develop best management plans that can organically treat contaminated stormwater from the on-set of construction to post construction measures.

For more information please contact the
Riverhead Town Engineering Department.
(631) 727-3200—201
(631) 369-7739
www.riverheadli.com

The Town of Riverhead
Storm Water Management Office
200 Howell Avenue
Riverhead, New York 11901
(631) 727-3200-201 Phone / (631) 369-7739

As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. Stormwater can fl ow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water.

By practicing healthy household habits, homeowners can keep common pollutants like pesticides, pet waste, grass clippings, and automotive fl uids off the ground and out of stormwater. Adopt these healthy household habits and help protect lakes, streams, rivers, wetlands, and coastal waters. Remember to share the habits with your neighbors!



In addition, the proper design and installation of Best Management Practices (BMP's) to mitigate storm water from leaving active construction sites can actually improve water quality in the event that a significant rain event where storm water exits the sites.

To comply with the Federal Clean Water Act, and State and local codes, the Town is requiring that development/ or redevelopment activity in which more than 1 acre of ground disturbance will occur, albeit commercial, residential, industrial, will be required to submit a Storm Water Pollution Prevention Plan (SWPPP) with a Notice of Intent (NOI) in accordance with Town of Riverhead Chapter 110. The purpose of these documents is to provide information to the Town on the impervious nature of the lot as well as the proposed grading. A more holistic approach to storm water management may be realized during this process to improve the water quality of our surface waters.



If the site is in close proximity to impaired water bodies, there are pollutants of concern (POC) that need to be addressed. The Town of Riverhead has several impaired water bodies within its boundaries

1. Flanders Bay, East/Center and its tributaries—POC= pathogens
2. Flanders Bay, West/Lower Sawmill Creek—POC= nitrogen and pathogens
3. Meetinghouse/Terrys Creeks and tributaries—POC = nitrogen and pathogens
4. Peconic River, Lower and tidal tributaries—POC = nitrogen and pathogens
5. Reeves Ban and tidal tributaries—POC = pathogens

Other water resources found in Riverhead include the following;

Deep Pond	Hallocks Pond	Grassy Pond
Duck Ponds	Merritts Pond	Peconic Bay
Eastern Long Island Sound	Peconic Lake	



New construction which disturbs more than one acre of land must apply for permit coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001 or GP-0-08-002). If the development disturbs less than one acre but is part of a larger common plan of development or sale (Subdivisions) or if the site is within an impaired waterbody watershed the owner must file for coverage.

Permit coverage begins when the Town has reviewed, commented, and approved the Storm Water Pollution Prevention Plan and has provided the applicant with the Municipal SWPPP Acceptance Form. The applicant then submits a Town approved Notice of Intent (NOI) along with the acceptance form to the NYSDEC.



Rain Gardens

Rain Gardens are typically a shallow depressional area designed to use the natural capacities of soil and vegetation to retain, cleanse, and infiltrate storm water. In other words rain gardens capitalize on low lying areas to capture runoff from driveways, and roofs, and use plants to filter out pollutants and reduce the erosive effects of runoff. The reason that rain gardens are so effective is that these gardens capture runoff before it gains enough volume to have any damaging properties and allow it to seep slowly into the ground.

According to the USEPA, nonpoint sources such as storm water runoff from an urbanized landscape, are the leading causes of urban stream water quality problems. Rain gardens are able to reduce this pollution because they create an ideal location where small, isolated amounts of runoff can be absorbed into the ground.

For those of you who are still skeptical about building a rain garden, here are some of the pros of the system. When properly built, a rain garden will reduce pollutant discharges and minimize stream bank erosion by reducing the amount of water entering streams and rivers. The mulch layer can remove heavy metals such as copper, zinc, and lead, and replenish groundwater slowly and steadily. You don't have to worry about mosquitoes either because the rain garden is designed to hold water for less than 48 hours so that mosquitoes can't breed.

If you are considering building a rain garden you can visit the Department of Environmental Conservation's website for information and design plans. **http://www.dec.ny.gov/public/44330.html**

Materials: Geotextile Fabric, mulch mix, of bioretention soil mix, and native drought tolerant plants. Now once you have all of your materials, your basin should be at least 7' x 10' with a minimum depth of 6 feet. After all of the earth has been removed, line the walls of your basin with a geotextile or filter fabric and then start by filling the bottom of the basin with 1 foot of ¾" crushed stone. Install an additional 4 inches of pea gravel, followed by the mulch mix and finish by covering the gravel with 30 inches of bioretention soil mix. When choosing plants for the surface of the rain garden, look for young plants that are native to the area and are drought tolerant as they will adapt better to the environment.

How Can Green Infrastructure Benefit the Environment?

The benefits of green infrastructure are particularly accentuated in urban and suburban areas where green space is limited and environmental damage is more extensive. Green infrastructure benefits include:

Reduced and Delayed Storm Water Runoff Volumes - By increasing the amount of pervious ground cover, green infrastructure techniques increase storm water infiltration rates, thereby reducing the volume of runoff entering our storm water systems, and ultimately our lakes, rivers, and streams.

Storm Water Pollutant Reductions - Green infrastructure techniques infiltrate runoff close to its source and help prevent pollutants from being transported to nearby soils.

Reduced Sewer Overflow Events - Utilizing the natural retention and infiltration capabilities of plants and soils, green infrastructure limits the frequency of storm sewer overflow events by reducing runoff volumes and by delaying storm water discharges.

Improved Air Quality - Green infrastructure facilitates the incorporation of trees and vegetation in urban landscapes, which can contribute to improved air quality.

Heat Island Effect - Green infrastructure reduces warm water discharge to streams which can harm fish. By collecting water in rain gardens and catch basins, the runoff can cool by up to 11 degrees Celsius before it returns to streams and rivers, thus preventing damage to the ecosystem.

Sources

http://www.fallschurchenvironment.org/usingrainbarrels.html

http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm#greenparking

http://www.stormh2o.com/october-2008/dry-rain-gardens.aspx

How Green Infrastructure Can Mitigate Storm Water Pollution and Reduce Storm Water Runoff

Riverhead Department of Engineering

(631) 727-3200 ext. 201

By Thomas Houghton

Green Infrastructure



The Town of Riverhead is home to some of the most beautiful landscapes and wildlife in Suffolk County. In order to preserve this natural resource we must try to help mother nature by trying to reduce our impact on the ecosystem.

In this pamphlet we will be focusing on ways to improve your home and community in order to alleviate some of the stress placed on the environment and your wallet. Green infrastructure can contribute to health and quality of life, such as forests that clean the air and filter and absorb storm water.



Why Storm Water Runoff is a Problem

Storm Water Runoff is the technical term for rain water that falls to earth and travels across roadways, parking lots and any other non permeable surfaces and enters the drain and exits in a collection basin, storm drain, or is diverted into a body of water.



Many problems arise when runoff is not properly drained. First, the water can gather pollutants as it travels and those pollutants are carried into locations such as our lakes and rivers. These pollutants can harm the ecosystem and even humans if they swim in contaminated water.

Secondly, with the amount of paved surfaces that exist today, runoff tends to pool up as a result of backed up storm drains that are having to work overtime. Backed up storm drains can cause road and property flooding/damage and are also a hazard to motorists.



What You Can Do To Help

There are an increasing number of ways that you can help alleviate the effects of storm water runoff in your neighborhood. One approach is utilizing green alternatives when designing or remodeling your home site.

Green Roofs are one of the best alternatives for your home. Green Roofs are generally flat and designed for the additional load of vegetation and a growing medium, planted on top of a waterproof membrane. Green Roofs absorb rain water and reduce the amount of runoff that runs off the house and enters the street. Green Roofs are also excellent insulators and when used in large numbers can greatly reduce urban temperatures by reducing the heat island effect. The heat island effect results from the high concentrations of buildings in a city absorbing solar energy causing higher temperatures in that particular area.

If home owners are considering retrofits, a Rain Barrel can help alleviate stress placed on the storm system by diverting roof runoff into a container that can be used to water existing landscape. For every 1,000 square feet of roof area served by a downspout, a one inch rain storm will produce 600 gallons of rain water. That just shows how much water a rain barrel can keep off the streets! Rain Barrels should be designed with an overflow valve so that winter ice does not build up and damage the system.

Keep a look out for illicit connections:

-Check out storm drains for signs of tampering, or surrounding ground for signs a pipe has been laid under ground to the basin.

-If you hear water running to a catch basin when it is not raining, this may be a sign that an illicit connection is present.

-If you smell raw sewage in a catch basin, this is a sure sign of a serious problem or illicit connection.

-If you think you may have found an illicit connection, call the town and let us know! See Resource page for contact information.

Maintaining your septic system:

-If the ground near your cesspool is soggy or saturated this is a sign that it may be time to get it pumped.

-Have your septic system checked every 3 years by a professional.

Pick up after your dog:

-If you take your dog for a walk and he or she poops on the road, near the road, or on a median, please pick it up. Your dogs waste will find its way to a catch basin.

-Visit www.poopbags.com or www.dogpoopbags.com for information on doggy waste bags.

-Animal Waste can either be flushed down the toilet (without bag) or thrown away in a biodegradable bag.

Participate in the Town's S.T.O.P. (Stop Throwing Out Pollutants) program which occurs twice a year.

Check the Resources on page 6 for more information on where you can drop off hazardous materials.

Resources

Hazardous Material Drop Points

Material	Drop Point
Oil	Nearest Auto Parts store or mechanics garage.
Paint, Solvents, and Light Bulbs Containing Mercury.	Town of Riverhead S.T.O.P. Program. For more information visit: riverheadli.com/sanitation.html
Rechargeable Batteries	Radioshack, Riverhead Town Hall Battery Repository
Yard Waste	Former Riverhead Town Land Fill. For more information visit: riverheadli.com/sanitation.html

Riverhead Town Engineering Dept.

Call: (631) 727-3200 Ext. 201 to report Illicit Connections or for any information regarding Storm Water Management.

http://www.riverheadli.com

Phase II Public Outreach Initiative Pamphlet by Storm Water Management in cooperation with Riverhead Town Engineering Dept. Pamphlet written and compiled by Ian Davison.

Storm Water Management Program

Riverhead Department of Engineering

(631) 727-3200 ext. 201

Town of Riverhead Storm Water Management



The Town of Riverhead is a diverse ecological community and is the home to hundreds of species of wildlife and sea life. In this Pamphlet we will be focusing on education about illicit discharge, and how you, as an individual, can help keep our community's groundwater, creeks, and larger surface waters clean. There are two bodies of water most people think of when dealing with pollution and run off on Long Island, The Peconic Bay and the Long Island Sound. There is also a third body of water far below us, our Aquifers. Long Island is situated over a sole source aquifer system that provides potable water to its residents. There are three layered aquifers on LI. The three aforementioned bodies of water provide a home to sea life and shell fish integral to our economy. Swimming areas are important to the members of our community and serve as a seasonal tourist destination. Our aquifers provide fresh water for drinking and irrigation of crops which is vital to our local farming community.



So let's look a bit at some of the substances harmful to our essential bodies of water. There are three main culprits responsible for beach closings, algae blooms, and unhealthy shell fish. These are high levels of Fecal coliform, increased amounts of Nitrogen, and toxins from engine oil and road grime, respectively. Fecal coliform, responsible for 37% of Suffolk County beach closings in 2006 (Information supplied by the EPA), is found in pet waste which can be washed into storm drains by rain which can potentially end up in local bodies of water. Fecal Coli Form can also find its way to bodies of water through potentially malfunctioning septic systems. Increased Nitrogen content, often responsible for algae blooms which can deplete the water of oxygen, is harmful to the health of fish and shellfish. A gross quantity of fertilizer containing nitrogen used on lawns that makes its way to the water, is known as illicit discharge. Nitrogen can also make it's way to our aquifers (it already has reached our shallowest aquifer) and makes them unsafe for drinking if the Nitrogen concentration becomes too high. Oil, more from illegal dumping than normal road grime, is another example of a problem we have with illicit discharge.

About Illicit Discharge



All the examples cited in the previous paragraph fall in the category of illicit discharge, but there are other, more serious examples. Connecting a drain from your home to a town catch basin (storm sewer) is a serious and fineable offense, and is known as an illicit connection. Illicit connections include the connection of a sanitary sewage pipe to a basin, and just to clarify, sanitary sewage is what you flush down your toilet, or dump down the drain. Another serious and fineable example is dumping waste, oil, chemicals, solvents, or paints into a catch basin. Drainage Basins are meant to catch, filter, and recharge water that contains normal amounts of road wash, but are not designed to handle any of the aforementioned substances. Those substances should be brought to your local recycling center for proper disposal. Check the resource page for more information on hazmat drop points.



What can I do to help?

So now you are wondering to yourself, how can I reduce illicit discharge and save the environment?

Here are some tips:

Lawn Care tips to Reduce Nitrogen Pollution:



-Minimize lawn areas, replacing turf with native and other low maintenance plantings.

-Improve soil structure by aerating your lawn and top dressing with compost.

-Allow grass to compost by leaving clippings in place when mowing. (Don't bag it)

-Use the least toxic method for weed and pest control. (less chemicals, more weed -pulling).

-Don't over water your lawn (excess water washes the nutrients from your soil).

-Test the soil annually before applying any fertilizer, so you know exactly what to apply, if any.

-Apply products sparingly, no more than 1lb. of Nitrogen per 1000 sq. ft./year.

-Choose organic fertilizers that have slow release nutrients.

-Read, understand, and follow all pesticide product labeling.

-Avoid run-off – do not apply fertilizers or pesticides within 100 ft of surface waters or -wetlands, when the ground is frozen, or when there is a chance of rain.

Lawn Care Tips courtesy of "PEP Talk"

What You Can Do To Help (Cont.)

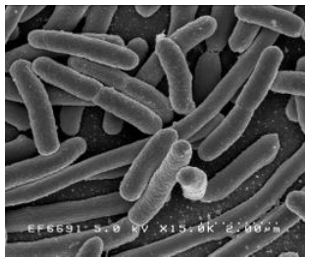
Create a Riparian buffer - Riparian is another word for the habitat, plants, and wildlife associated with the bank of a watercourse. If you live along a river, maintaining a healthy buffer consisting of native plants between your property and the water will reduce runoff full of E. Coli and many other pollutants.

Clean up after your pet - Pet waste causes a large percentage of E. Coli problems. Even if you're miles from a waterbody, the stormwater that washes over you dog's waste is going to travel further than just your backyard.

Be Responsible - When at the waterfront, use public restrooms, pack out your waste, or at the least bury your waste above the high water mark.

Don't feed the wild animals - Waterfowl become reliant on handouts and visit those locations frequently. As a result there are higher concentrations of feces in the area, creating a hot spot for E. Coli.

E. Coli



Pet Waste Affects Water Quality

Did you know pet waste is a health hazard and a stormwater pollutant?

Stormwater runoff can wash bacteria from pet waste directly into local creeks and waterways. Bacteria, parasites and viruses contained in pet waste are a health risk to other animals and people, especially children. Pollution from Pet Waste is easily prevented.

- Always clean up after your pet
- Use a scooper, bag or shovel to pick up pet waste.
- Double bag pet waste before disposing in trash
- Do not dispose of pet waste in a storm drain, catch basin or sewer.
- Do not use pet waste as a fertilizer or add to a compost pile

Sources

http://www.willametteriverkeeper.org/programs/ecoli/e_colimain.htm

http://www.stormh2o.com/may-2008/bacterial-research-bmps.aspx
http://www.startwithmiller.com/pdf/landandwater.pdf
http://www.stormh2o.com/march-april-2009/florida-tmdl-planning.aspx
http://www.stormh2o.com/september-2008/dead-zone-hypoxia.aspx
http://www.erie.gov/environment/pdfs/septic_system_brochure.pdf
http://www.erie.gov/environment/pdfs/pet_waste.pdf

Waterborne Bacteria Prevention

Riverhead Department of Engineering

(631) 727-3200 ext. 201

By Thomas Houghton

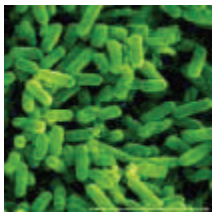
Introduction

Imagine its Saturday and you wake up and decide that today is the perfect beach day. You make a bunch of sandwiches, pack your cooler and stuff all of your favorite beach gear into a huge bag. After you finish breakfast and get the kids dressed you all jump into the car excited for a fun day at the beach. The anticipation builds as the temperature rises and you just can't wait to jump out of the car and hop right into the nice cool water. But you pull into the beach parking lot and suddenly your heart sinks, there is a sign that says, "Beach Closed"! You think to yourself, how could this be, its beautiful out! Upon further inspection of the sign you discover that the beach is closed due to high levels of Fecal Coliform from pet and wildlife waste in the water. During 2006 alone, Fecal Coliform was responsible for 37% of Suffolk County Beach closings! This situation could happen at anytime. Keep reading to find out more about these pollutants and how to reduce them.



About Stormwater Pollution

Fecal Coliform and E. Coli are two of the most abundant bacteria polluting our rivers, lakes, and bays. As mentioned earlier, Fecal Coliform is the technical term for either pet waste or sanitary waste that enters the storm water system primarily through storm drains and ends up being washed into local bodies of water.



Fecal Coliform

E. Coli is another form of bacteria that is abundantly found in water bodies. E. Coli belongs to the Fecal Coliform family of bacteria and is consistently monitored in the lakes, rivers, and beaches in the area. Canadian Geese are an example of a contributor of E. Coli to our water bodies through the massive amount of feces that are deposited into our water bodies daily.

Fecal Coliform Infected Stream



What You Can Do To Help

Even though Riverhead Town is going to great lengths to solve the E. Coli and Fecal Coliform problems through their MS4 (Municipal Separate Storm Sewer System) program, there are a number of things that the homeowner can do to help.

Disconnect your downspout and manage your storm water on site - During a rain event it's possible for the Town's storm system to become overloaded due to massive amounts of runoff coming from homes. If an overflow occurs the system may pick up large amounts of debris and waste such as animal feces on the side of the road. In order to reduce the possibility of an overflow the homeowner could install Rain Barrels or a Rain Garden to catch and treat their runoff. By doing so hundreds of gallons of water are kept out of the catch basins and ultimately the storm water system. If you would like to learn more about these alternatives, Riverhead Town Engineering Department has published a pamphlet in regards to multiple ways to reduce your storm water runoff.

Do I smell something?

Signs of a failing system are:

Sewage in the yard.

A foul smelling, blackish/grayish liquid in the drainfield area.

Sewage backup in sinks, toilets, showers, and bath tubs.

Isolated depressions in the backyard; if you have these, please call your plumber. There have been old system failures in the past few years around Long Island, don't be a casualty to your septic.

Can septic systems affect communities?

Septic systems are considered the 2nd most frequent source of groundwater pollution by state agencies.

U.S. Environmental Protection Agency, National Water Quality Inventory Report to Congress (305(b) Report), 1998

Almost 10,000 water body impairments are due to pathogen or nutrient contamination. Septic systems are contributors to these containments.

U.S. Environmental Protection Agency, 1998 Section 303(d) List Fact Sheet: National Picture of Impaired Waters Highlights of the 1998 303(d) Lists (based on Tracking System data available 04/06/00)



Septic System Maintenance

1. Direct roof, driveway, and other run-off away from your septic tank and leaching field to avoid adding extra water to the soil.
2. Do not plant trees or shrubs too close to your field or tank. Roots can cause damage and clog your leaching field.
3. Do not bury the septic tank or leaching field under landscaping materials (such as plastic) or pavement;
4. Use basket strainers in all your sinks to catch hair—a big problem for septic systems and guaranteed to shorten the life of your field.
5. Look for liquid detergents or concentrated detergents that don't have phosphates in them.
6. Use a dry well for backflushing water softeners, instead of releasing it into your system.
7. Use a lint filter on your washing machine; lint is a major source of solids that clog leaching fields, especially from the fibers from synthetic clothing which clog the pores of the soil and do not break down as natural fibers do.
8. Do not flush facial tissue, paper towels, coffee grounds, tea leaves, fats or grease, cigarette butts, filters, sanitary napkins, newspaper, disposable diapers, condoms, metal or metal items. All of these items can clog your tank and leaching fields.
9. Don't use a garburetor. It adds solids which can be flushed into your leaching field.
10. Avoid disinfectants like bleach which kill beneficial bacteria in the septic tank.

Town of Riverhead
Engineering Department
200 Howell Avenue
Riverhead, NY 11901
Phone (631) 727-3200-201 Fax (631) 369-7739

Handle It.



Maintain Your Septic.

Protect Your Health.

Maintain my what?

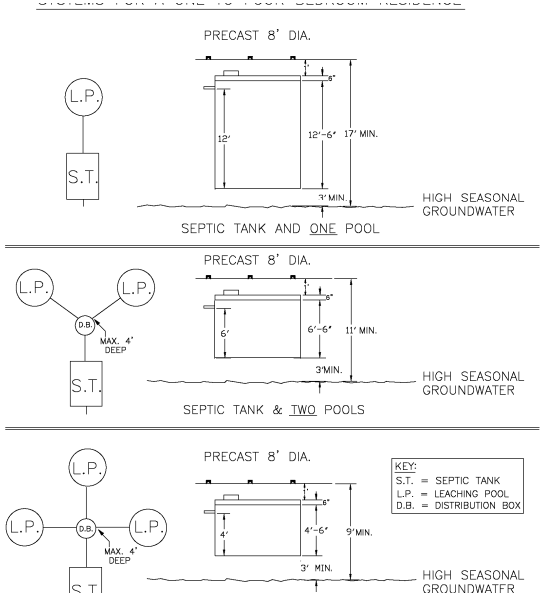
A septic system is an on-site system of structures that treats household waste with a septic tank and a soil absorption system commonly know as leaching pools. Failing septic systems can contaminate lakes, creeks, and shallow drinking water supplies.

Many older systems on Long Island consist of concrete block built leaching pools. Sewage from the home would be conveyed by the piping network outside into the leaching pool and in some instances homes had an overflow pool for safety. The newer systems, regulated by the Suffolk County Department of Health Services, primarily consist of a precast septic tank which is the first stop for the sanitary solids and liquids, when the tank reaches a certain level, the liquids continue on to a system of leaching pools where the liquid is absorbed into the subsurface soils. The septic tank is a storage area and biological process area for the solids. When the septic tank is full, it should be pumped out.



What if it doesn't work?

A septic system that does not work can have a negative impact on human and animal health. Inadequate treatment of wastewater allows bacteria, viruses, and other disease causing pathogens to enter surface and ground water supplies. Protect your health, drinking water, and property value by properly maintaining your septic system. Do not dump hazardous waste down the sink drain or the toilet, this can be corrosive to the pipes and damaging to the environment



How do I make sure it's working?

A properly functioning septic system will treat wastewater in a natural and safe way. Routine maintenance of your system will reduce both risks to human health and costs.

Septic owners should:

Keep accurate records (i.e. dates of inspection, pumping, problems).

Have systems inspected and pumped every 2 to 3 years.

Prevent vehicles and trailers from driving or parking on top of the leaching field.

Avoid the use of additives. Save your money for an inspection or pumping.

Where is this thing?

Try finding your septic tank by:

Going to the basement or area of the house that has the sewer pipes going outside through the wall or floor. This will indicate the direction or location of the septic tank.

Taking a metal rod and gently probing in the soil about 10 to 15 feet from the foundation of the house. Search for pipes or some sort of metal, plastic, or concrete tank.

Find the system's leaching field by looking for:

Areas where grass isn't growing well, grass is greener, or it grows faster.

Areas where there is a slight depression or mound.

Areas where the soil is soggy when the rest of the yard is dry.

Once your locate your system draw a simple map of the location to keep in your records. To prevent further malfunctions you may want to install a fence around your leaching field area.

If you **DO NOT** receive a sewage bill, then you own a septic system.

If you live in an area of high ground water or are near a water body, you may have a different system than discussed in this brochure

APPENDIX D

Inventory and Description of

Municipal Buildings

Municipal Parking Lots

Waterfront Parks

Recreational Parks

Municipal Buildings

Town of Riverhead
East End Arts Council Buildings

133 & 141 E. Main St Riverhead

SCTM NO. 0600-129-1-15 0600-129-1-16

Property Size	.42 & ??	Acre			
Parking Lot:	Yes		Building	Yes	
Size	20,594.00	SF	Size	5,030.0	SF
Material	Bkn Asphalt				

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line

163' to the south

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Site Features		
	Yes	No
Playgrounds		x
Ball Fields		x
Docking Area		X
Boater Pumpout		X
Restroom Bldgs	x	

Notes

Restrooms inside building

Sanitary System Yes

Type Sewer District

Building lines replaced in September 2010

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
East End Arts Council Buildings
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Septic
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 129.-1-15

Property Information

SCTM# 129.-1-15 Site Address 133 E Main St City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 118,800 Land Value 42,000 Acres 0.42 Property Class >1 use sm bld

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LM001	Landmark
LT301	Light district
PK301	Parking
SE301	Rhd full sewer cap
SE306	Rhd sewer rent
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
03/01/1996	03/20/1996	11766	681	$225,000.00	Town, Of Riverhead

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront

Property Information for SCTM# - 129.-1-16

Property Information

SCTM# 129.-1-16 **Site Address** 141 E Main St **City** Riverhead **Zip**

Owner Information

Owner Name Town Of Riverhead **Additional Owner Info**

Street Address 200 Howell Ave **City** Riverhead **Zip** 11901

Assessment Information

Total Value 72,400 **Land Value** 36,000 **Acres** 0.00 **Property Class** Converted Res

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LM001	Landmark
LT301	Light district
PK301	Parking
SE301	Rhd full sewer cap
SE306	Rhd sewer rent
WD301	Riverhead water

Tax Exemption Information

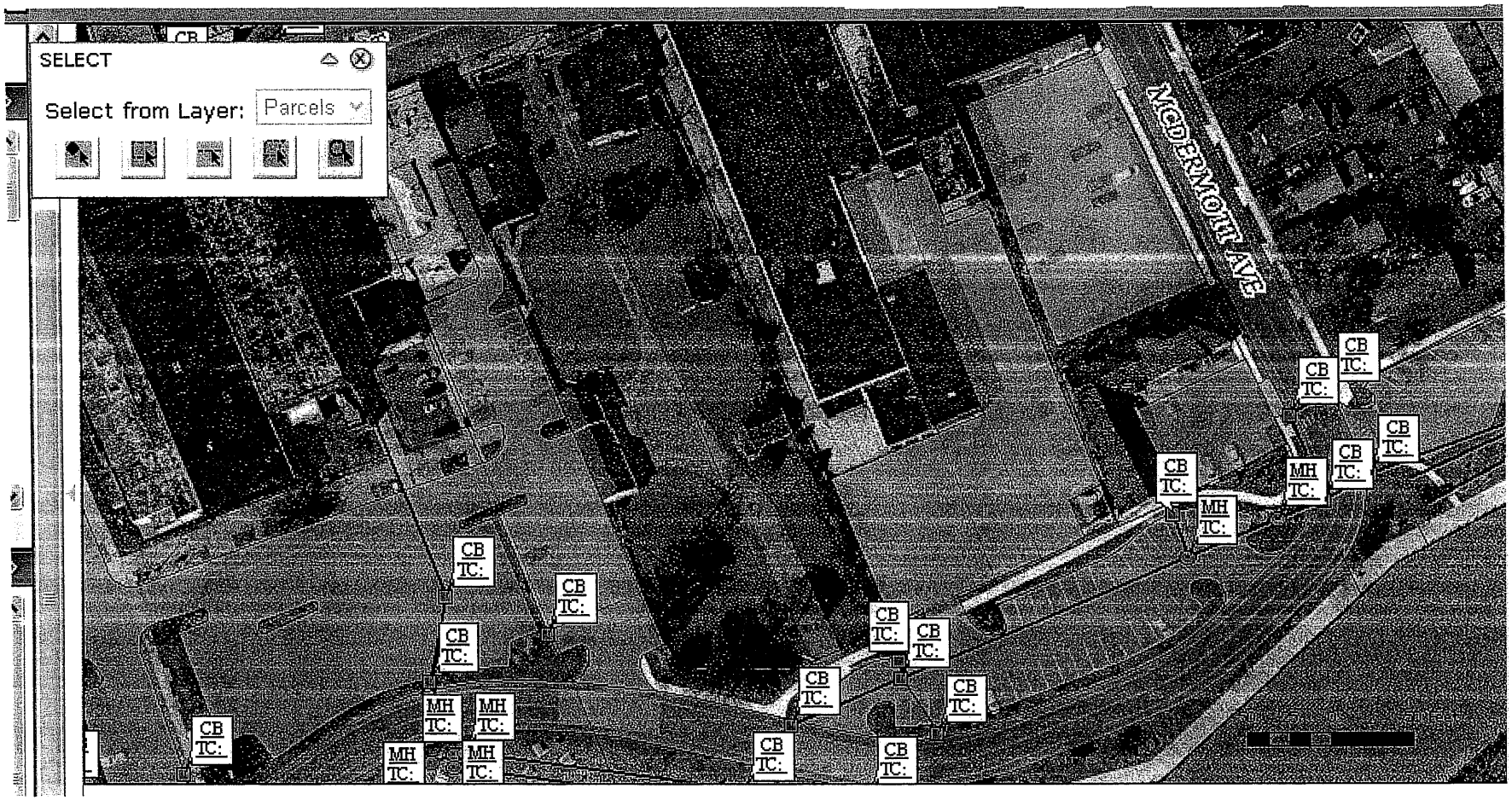
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront



Riverhead – East End Arts Buildings

Town of Riverhead
Henry Pfeifer Community Center

4062 Grumman Blvd Calverton

SCTM NO. 0600-135-1-p/o 7.33

Property Size		Acre			
Parking Lot:	Yes		Building	Yes	
Size	20,594.00	SF	Size	5,030.0	SF
Material	Asphalt				

Local Water Bodies: Yes

Type: Freshwater McKay Lake

Distance to Property Line

Adjacent

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Satisfactory							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds	1		
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Septic System

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

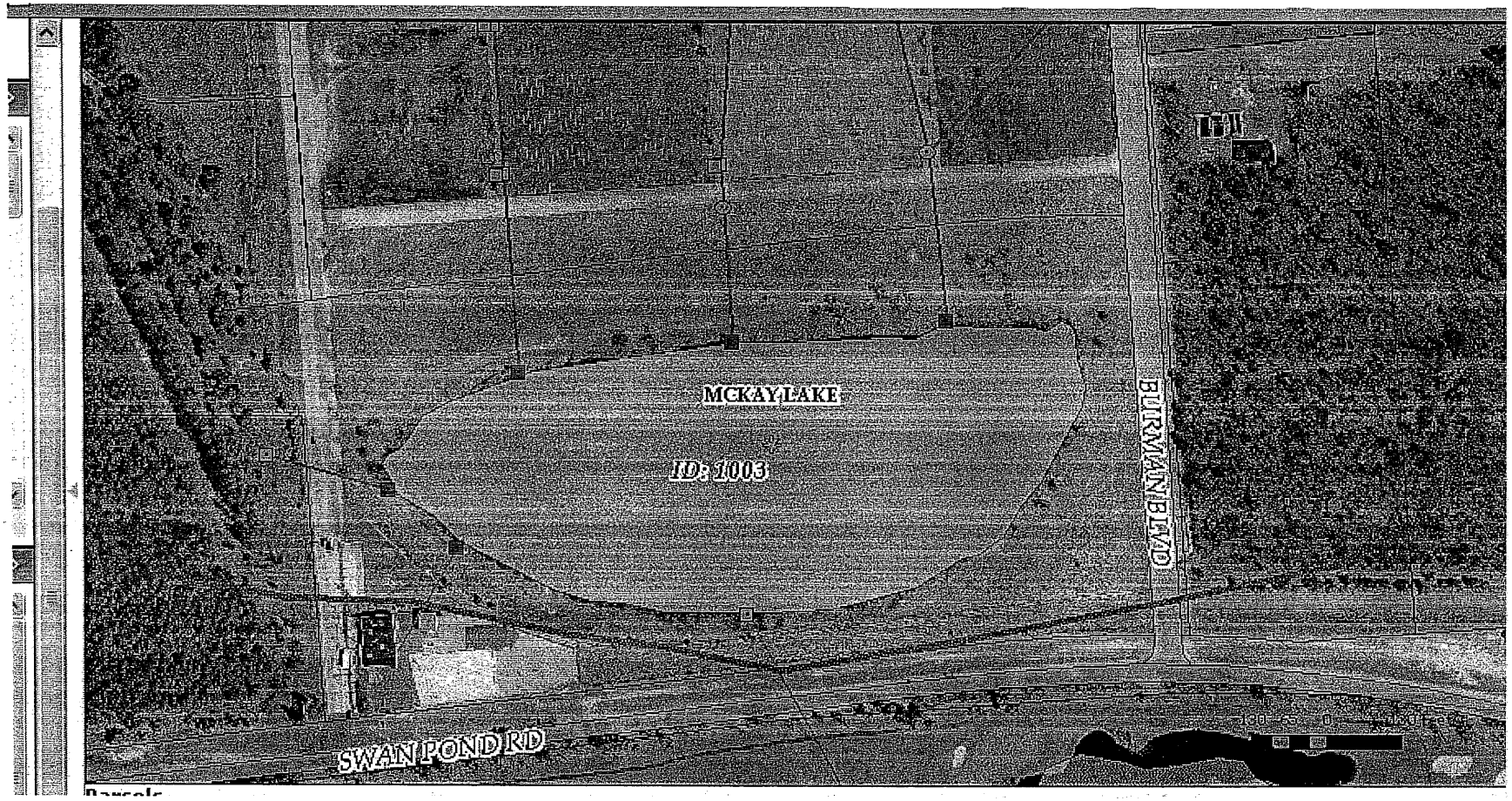
Best Management Practice Selection
Henry Pfeifer Community Center
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Septic Have to recalculate septic capacity given change of use
Trash
Petroleum Underground oil tank which has to be removed; we received permit for new AST 2009

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl



Calverton – Henry Phieffer Community Center

Town of Riverhead
George Young Community Center - Jamesport

446 S. Jamesport Avenue Jamesport

SCTM NO.	0600-69-2-5				
Property Size	5.0	Acre			**Local Water Bodies:** No
Parking Lot:	Yes		Building	Yes	**Type:**
Size	14,203.00	SF	Size	5,861.0 SF	**Distance to Property Line**
Material	Asphalt				
Winter Road Main.	Yes				

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds	1		
Ball Fields	1	x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Septic System

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
George Young Community Center - Jamesport
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Septic
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 69.-2-5

G/cc

Property Information

SCTM# 69.-2-5 Site Address 446 S Jamesport Ave City Jamesport Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 165,500 Land Value 19,400 Acres 5.00 Property Class Rec facility

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD304	Jamesport fire
HD947	Jmpt Hist District
LT301	Light district
SC001	Scavenger waste dist
WD340	Water ext 32j

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RLC) Rural Corridor;(HC) Hamlet Center;(RB80) Residence B-80

Jamesport – George Young Community Center

Town of Riverhead
Town Hall and Police Station

200 Howell Riverhead

SCTM NO. 0600-127-5-28.2

Property Size	3.7	Acre			
Parking Lot:	Yes - 2		Building	Yes -2	
Size	73,154.00	SF	Size	23,655.0	SF
Material					

Local Water Bodies: No

Type:

Distance to Property Line

Winter Road Main.

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Sewer District

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Town Hall and Police Station
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 127.-5-28.2

Property Information

SCTM# 127.-5-28.2 Site Address 200 Howell Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 852,000 Land Value 72,000 Acres 3.70 Property Class Government

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SE301	Rhd full sewer cap
SE306	Rhd sewer rent
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-3) Office;(RA40) Residence A-40;(HC) Hamlet Center



Riverhead – Town Hall and Police Department

Town of Riverhead
East Lawn Building

Riverhead

SCTM NO. 0600-129-3-35.2

Property Size	0.2	Acre			
Parking Lot:	No		Building	Yes	
Size		SF	Size	2,000.0	SF
Material					

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line

314' to the south

Winter Road Main.

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Sewer District

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
East Lawn Building
Stormwater Mangement
Parking Lot,

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 129.-3-35.2

Property Information

SCTM# 129.-3-35.2 Site Address 542 E Main St City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 34,600 Land Value 7,100 Acres 0.20 Property Class Converted Res

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LM001	Landmark
LT301	Light district
SE301	Rhd full sewer cap
SE306	Rhd sewer rent
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-4) Office/Residential Transition



Riverhead – East Lawn Builidng

Town of Riverhead
1295 Pulaski Street

133 & 141 E. Main St Riverhead

SCTM NO. 0600-121-1-7

Property Size		Acre			
Parking Lot:	Yes		Building	Yes	
Size	29,116.00	SF	Size	25,000.0	SF
Material	Asphalt				

Local Water Bodies: Yes

Type: Freshwater Wetland -R-5 ID:1502

Distance to Property Line

Adjacent to the south

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Satisfactory							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Septic System

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
1295 Pulaski Street
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Septic
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 121.-1-7

Property Information

SCTM# 121.-1-7 | Site Address 1295 Pulaski St | City Riverhead | Zip

Owner Information

Owner Name Town of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 353,400 | Land Value 33,000 | Acres 2.00 | Property Class Govt bldgs

Special District Information

Code	Special District
LT301	Light district
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
SC001	Scavenger waste dist
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
02/25/2009	03/04/2009	12582	46	$2,500,000.00	Town of Riverhead
09/27/2001	09/27/2001	12143	947	$1.00	Riverhead Bldg Supply
10/01/1985	11/27/1985	318	00786	$675,000.00	Riverhead, Bldg Supply Cor

Zoning Information

Code (Ind C) Industrial C;(RB40) Residence B-40



Riverhead – 1295 Pulaski Street

Town of Riverhead
Jamesport Ambulance

20 Manor Lane Jamesport

SCTM NO. 0600-68-2-28.4

Property Size		Acre			
Parking Lot:	Yes		Building	Yes	
Size	5,881.00	SF	Size	1,238.0	SF
Material	Blue Stone				

Local Water Bodies: Yes

Type: Freshwater Wetlands-Fireman's Pond

Distance to Property Line

373' to the northwest

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		Restrooms inside building

Sanitary System Yes

Type Septic

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Jamesport Ambulance
Stormwater Mangement
Parking Lot,

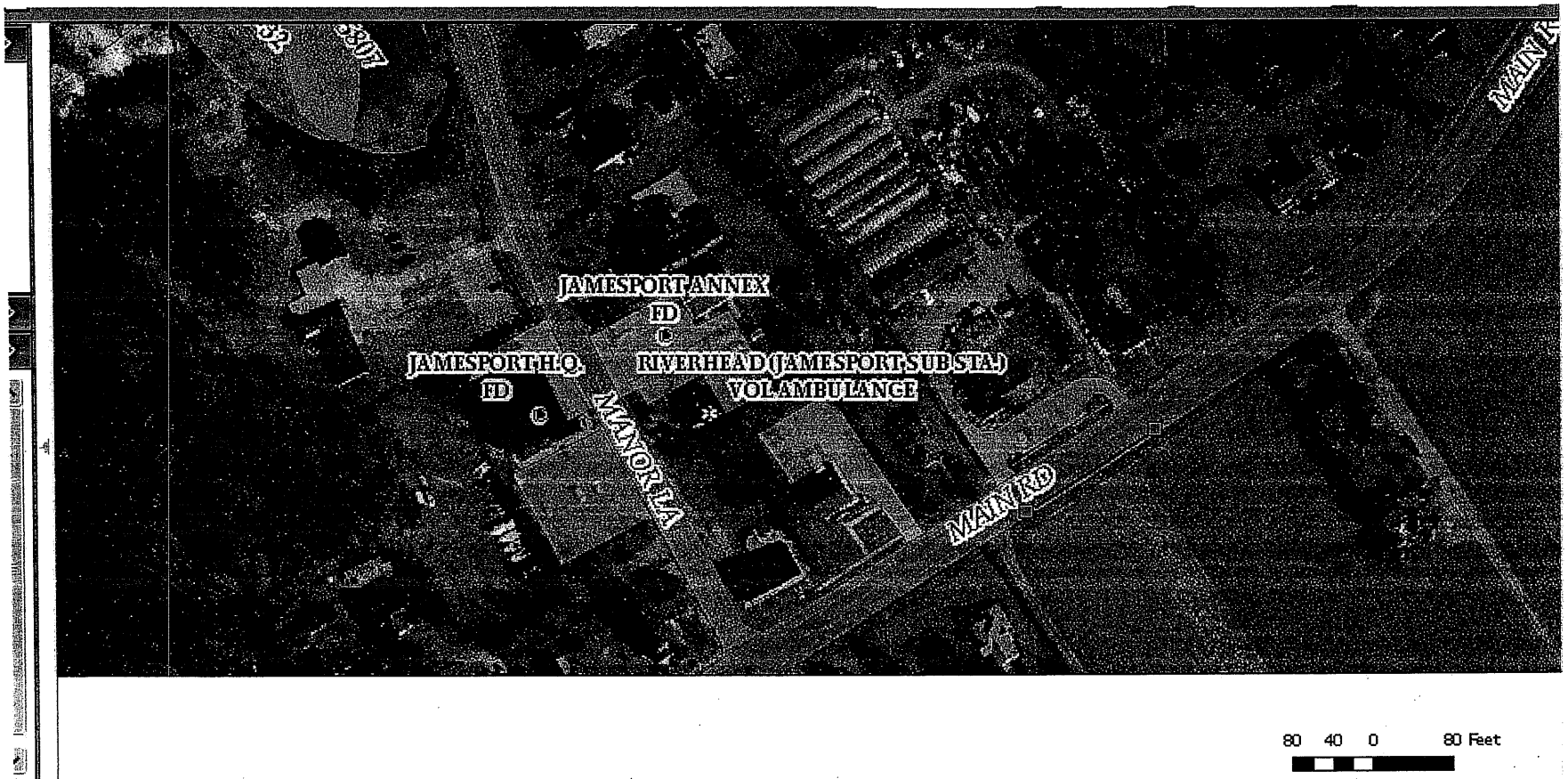
Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl



Jamesport Ambulance Sub-Station

Property Information for SCTM# - 68.-2-28.4

Property Information

SCTM# 68.-2-28.4 Site Address 20 Manor Ln City Jamesport Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 11,500 Land Value 11,500 Acres 0.40 Property Class Police/fire

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD304	Jamesport fire
LT301	Light district
SC001	Scavenger waste dist
WD340	Water ext 32j

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (HC) Hamlet Center

Town of Riverhead
Riverhead Ambulance

SCTM NO. 0600-108-2-5

Property Size	1.6	Acre			
Parking Lot:	Yes		Building	Yes	
Size	8,975.00	SF	Size	2,677.0	SF
Material	Asphalt				

Local Water Bodies: Yes

Type: Freshwater Wetlands

Distance to Property Line

242' adjacent

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Fair							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs	x		

Sanitary System Yes

Type Septic

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Riverhead Ambulance
Stormwater Mangement
Parking Lot,
Future- consider reconstructing with either permeable pavers and/or rain gardens

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Nitrogen
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 108.-2-5

Property Information

SCTM# 108.-2-5 Site Address 1121 Osborn Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 147,400 Land Value 31,400 Acres 1.60 Property Class Police/fire

Special District Information

Code	Special District
FD302	Rvrhd fire zone 1
AM001	Rvrhd ambulance dist
LT301	Light district
SC001	Scavenger waste dist
WD301	Riverhead water

Tax Exemption Information

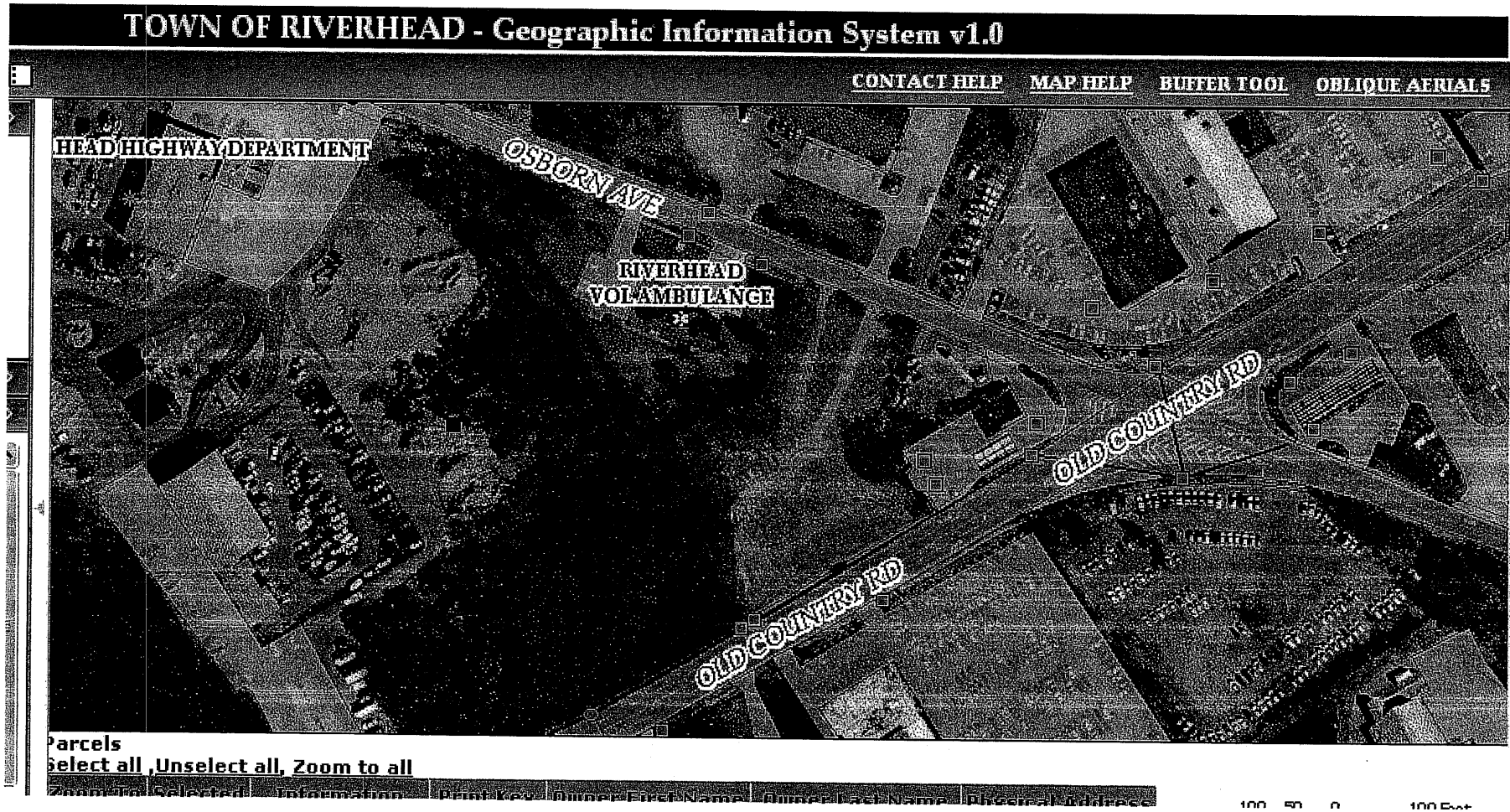
Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
11/01/1986	01/27/1986	10231	00260	$1.00	Suffolk County

Zoning Information

Code (BC) Business Center



Riverhead Ambulance

Municipal Parking Lots

Town of Riverhead
Griffing Avenue Parking Lots

SCTM NO. Multiple

Property Size	1.85	Acres
Parking Lot:	N/A	
Size	1.85	Acres
Material		

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line
252 to the SW

Winter Road Main. yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Average							
Swept Dates								
Quantity Removed (CY)								

	Play Areas	
	Yes	No
Playgrounds		x
Ball Fields		x
Basketball Court		x
Tennis Courts		x
Restroom Bldgs		x

Notes

Sanitary System
Type n/a

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

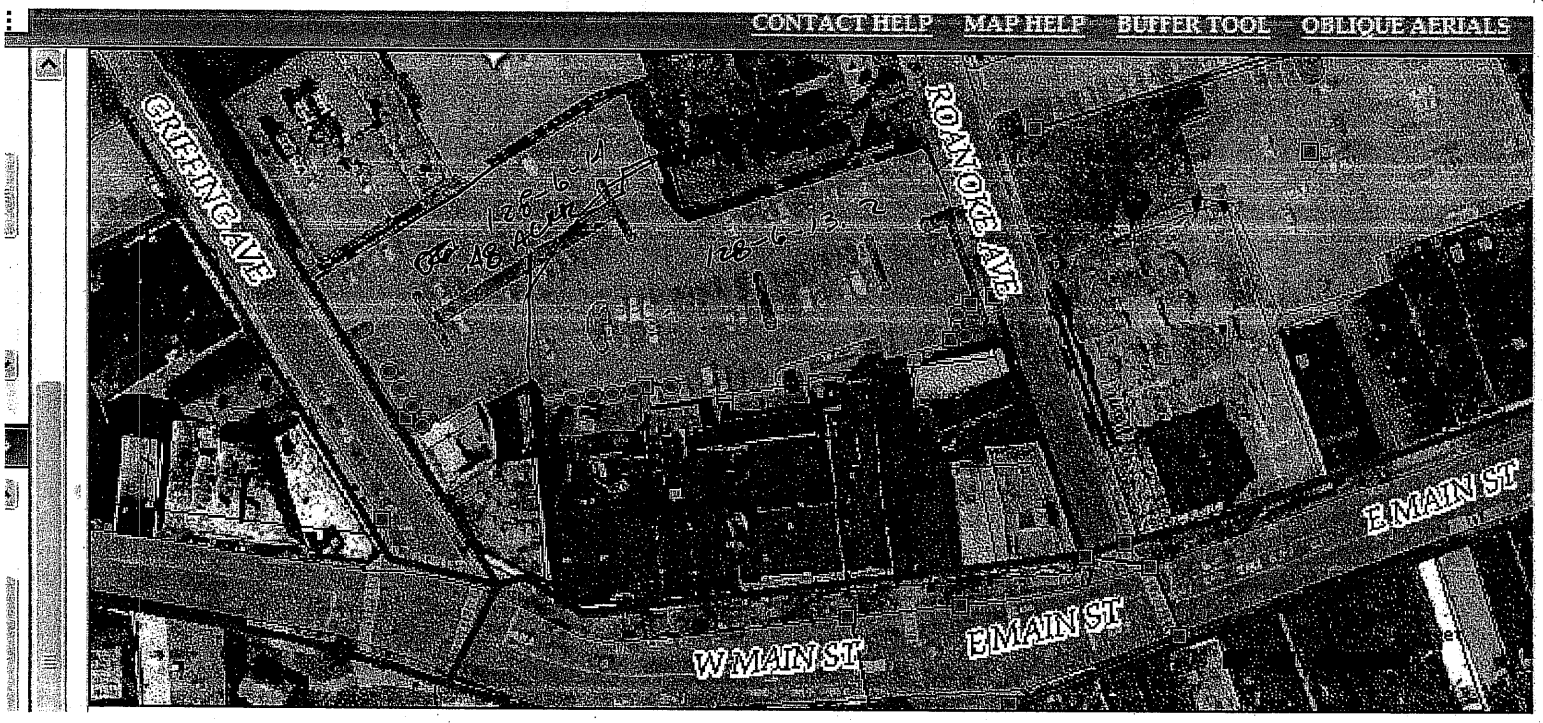
Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								



128-3-36
0.8 ACRES
PAVED AREA
26,429 SF

Griffing Parking



128-6-13.2
128-6-14

PAVED AREA
54,342 SF

Property Information for SCTM# - 128.-6-13.2

Property Information

SCTM# 128.-6-13.2 Site Address City Zip

Owner Information

Owner Name Additional Owner Info

Street Address City Zip

Assessment Information

Total Value Land Value Acres Property Class

Special District Information

No Special District Information found

Tax Exemption Information

No Exemption Data available

Sales Information

No Sale Data available

Zoning Information

Code (DC-3) Office;(DC-1) Main Street

Property Information for SCTM# - 128.-6-14

Property Information

SCTM# 128.-6-14 Site Address 136 Griffing Ave City Riverhead Zip

Owner Information

Owner Name Riverhead Publ Pkng Dist #1 Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 10,400 Land Value 10,400 Acres 0.48 Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-3) Office;(DC-1) Main Street

Property Information for SCTM# - 128.-3-36

Property Information

SCTM# 128.-3-36 Site Address 157-167 Griffing Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 12,600 Land Value 12,600 Acres 0.80 Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-3) Office;(DC-1) Main Street

Town of Riverhead
Hulse Landing Parking Lot and Beach Access

	917 & 937 Hulse Landing Rd		Wading River			
SCTM NO.	0600-28-1-15		0600-28-1-16			
Property Size	.47 & .38	Acre				
Parking Lot:	Yes - 2		Building	No		
Size	14,650.00	SF	Size		SF	
Material	Asphalt					
Winter Road Main.	No.					

Local Water Bodies: Yes

Type: Long Island Sound

Distance to Property Line

567' to the south

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Satisfactory							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs		x	

Sanitary System Type

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Hulse Landing Parking Lot and Beach Access
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 28.-1-16

Property Information

SCTM# 28.-1-16 | Site Address 937 Hulse Landing Rd | City Wading River | Zip

Owner Information

Owner Name Town of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 10,300 | Land Value 10,300 | Acres 0.38 | Property Class Parking lot

Special District Information

Code	Special District
SC001	Scavenger waste dist
WD339	Water ext 33

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB80) Residence B-80

Property Information for SCTM# - 28.-1-15

Property Information

SCTM# 28.-1-15 **Site Address** 917 Hulse Landing Rd **City** Wading River **Zip**

Owner Information

Owner Name Town of Riverhead **Additional Owner Info**

Street Address 200 Howell Ave **City** Riverhead **Zip** 11901

Assessment Information

Total Value 8,900 **Land Value** 8,900 **Acres** 0.47 **Property Class** Parking lot

Special District Information

Code	Special District
SC001	Scavenger waste dist
WD339	Water ext 33

Tax Exemption Information

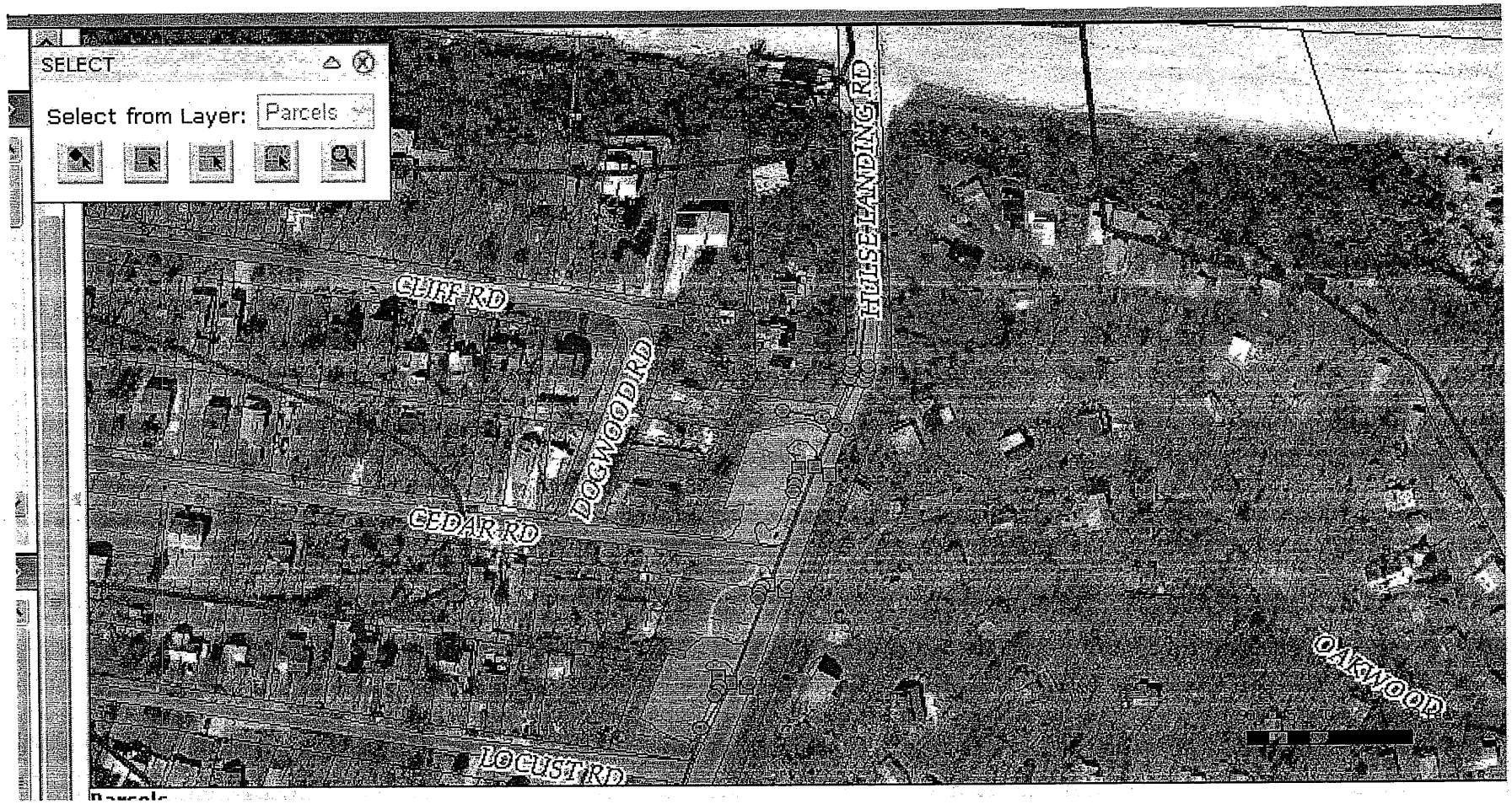
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB80) Residence B-80



Wading River – Hulse Landing Road

Town of Riverhead
Tuthill Muniicpal Parking Lot - Main Street

414 East Main Street Riverhead

SCTM NO. 0600-129-3-11

Property Size	0.48	Acres
Parking Lot:	Yes	
Size	0.48	Acres
Material	Asphalt	

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line
515' to the SE

Winter Road Main. No

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Basketball Court		x	
Tennis Courts		x	
Restroom Bldgs		x	

Sanitary System Type N/A
Sewer District

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Tuthill Muniicpal Parking Lot - Main Street
Stormwater Mangement

Parking Lot,

consider sinking traffic islands and making them into rain islands
consider permeable pavers in future

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

petroleum products
Trash

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 129.-3-11

Property Information

SCTM# 129.-3-11 Site Address 414 E Main St City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 40,000 Land Value 40,000 Acres 0.48 Property Class Vacant comm

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
PK301	Parking
SE301	Rhd full sewer cap
WD301	Riverhead water

ax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-5) Residential



Municipal Parking Lot at Tuthills Funeral Home

Town of Riverhead
Riverhead Railroad Station and Municipal Parking Lot

SCTM NO. Multiple

Property Size		Acres
Parking Lot:	N/A	
Size	1.90	Acres
Material		

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line
390' to the SW

Winter Road Main. No

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds		x
Ball Fields		x
Basketball Court		x
Tennis Courts		x
Restroom Bldgs	x	

Notes

Constructed with Grant monies in 2005

LIRR has allowed the Town of Riverhead to maintain and upkeep the Railroad Station Building which has two restrooms inside. The building is currently vacant

Railroad building has 2 restrooms

Sanitary System

Type Sewer District

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Riverhead Railroad Station and Municipal Parking Lot
Stormwater Mangement

Parking Lot,

consider sinking traffic islands and making them into rain islands

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

petroleum products
Trash

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 128.-3-2

Property Information

SCTM# 128.-3-2 Site Address 243 Railroad St City Riverhead Zip

Owner Information

Owner Name Town of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 19,000 Land Value 19,000 Acres 0.25 Property Class Vacant comm

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
EZ001	Empire Zone
FD302	Rvrhd fire zone 1
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
05/05/2000	06/07/2000	12047	281	$50,000.00	Town, Of Riverhead
03/20/1999	04/07/1999	11955	921	$1.00	Feldman, Arnold
10/01/1987	10/27/1987	10455	00087	$38,000.00	Lowell, Edith B

Zoning Information

Code (DC-3) Office

Property Information for SCTM# - 128.-3-8

Property Information

SCTM# 128.-3-8 | Site Address 222 Court St | City Riverhead | Zip

Owner Information

Owner Name Town of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 15,000 | Land Value 15,000 | Acres 0.20 | Property Class Res vac land

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
EZ001	Empire Zone
FD302	Rvrhd fire zone 1
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

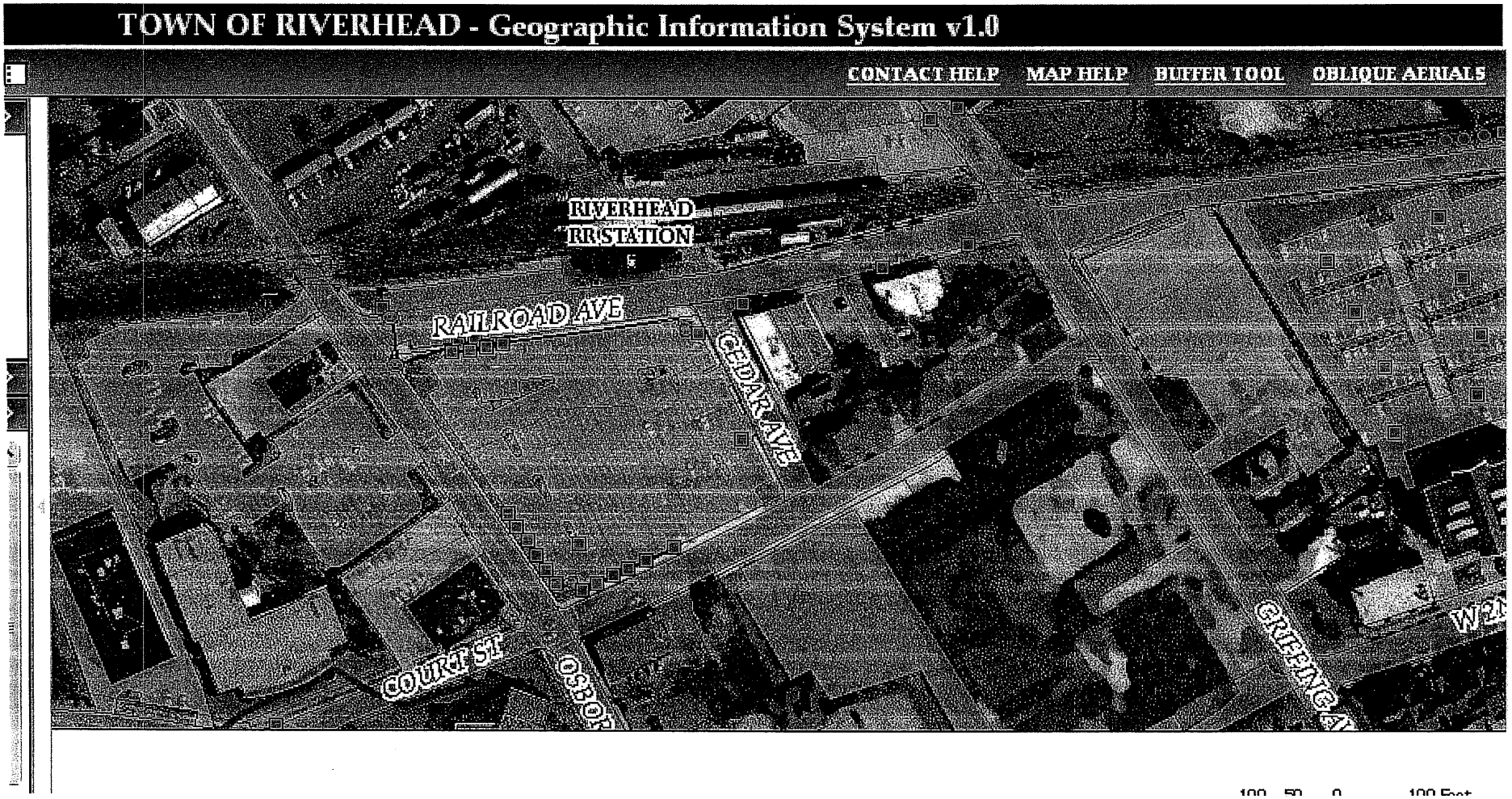
Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
07/01/1984	07/12/1984	9598	00459	$1.00	Portion Properties Inc

Zoning Information

Code (DC-3) Office



Riverhead Railroad Station and Municipal Parking lot

Town of Riverhead
Lombardi Park and First Street Municipal Parking Lot (East Ave and Roanoke & Roanoke to Griffing)

SCTM NO. 0600-128-6-13.2 First Street btwn Griffing & Roanoke
0600-128-6-66.4 First Street btwn East Ave & Roanoke

Property Size	4.12 (lot 66.4)	Acres
Parking Lot:	yes	
Size	3.69 / 1.27	Acres
Material	Asphalt	

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line 500' SW

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Basketball Court		x	
Tennis Courts		x	
Restroom Bldgs	0		

Sanitary System Type

Fertlizer/Pesticide Usage

Location Placed Lombardi Park

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Lombardi Park and First Street Municipal Parking Lot (East Ave and Roanoke & Roanoke to Griffing)
Stormwater Mangement
Parking Lot,
Future- consider renovating islands as sunken stormwater islands

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 128.-6-13.2

Property Information

SCTM# 128.-6-13.2 Site Address City Zip

Owner Information

Owner Name Additional Owner Info

Street Address City Zip

Assessment Information

Total Value Land Value Acres Property Class

Special District Information

No Special District Information found

Tax Exemption Information

No Exemption Data available

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-3) Office

Property Information for SCTM# - 128.-6-66.4

Property Information

SCTM# 128.-6-66.4 **Site Address** Roanoke Ave **City** Riverhead **Zip**

Owner Information

Owner Name Riverhead Publ Pkng Dist #1 **Additional Owner Info**

Street Address 200 Howell Ave **City** Riverhead **Zip** 11901

Assessment Information

Total Value 45,000 **Land Value** 45,000 **Acres** 4.12 **Property Class** Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
EZ001	Empire Zone
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

ax Exemption Information

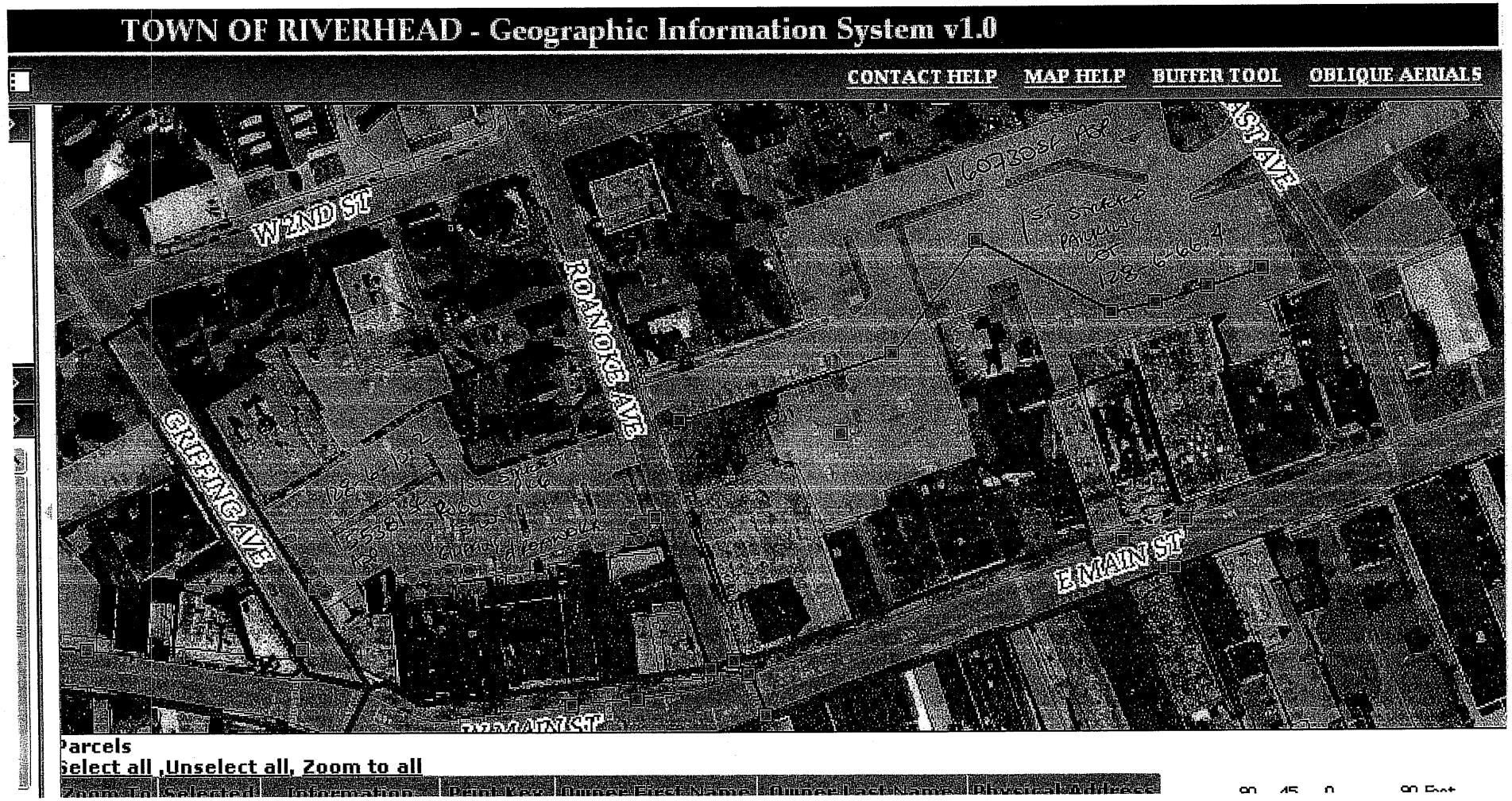
Exemption Code	Description
13500	TWN IN CO

Sales Information

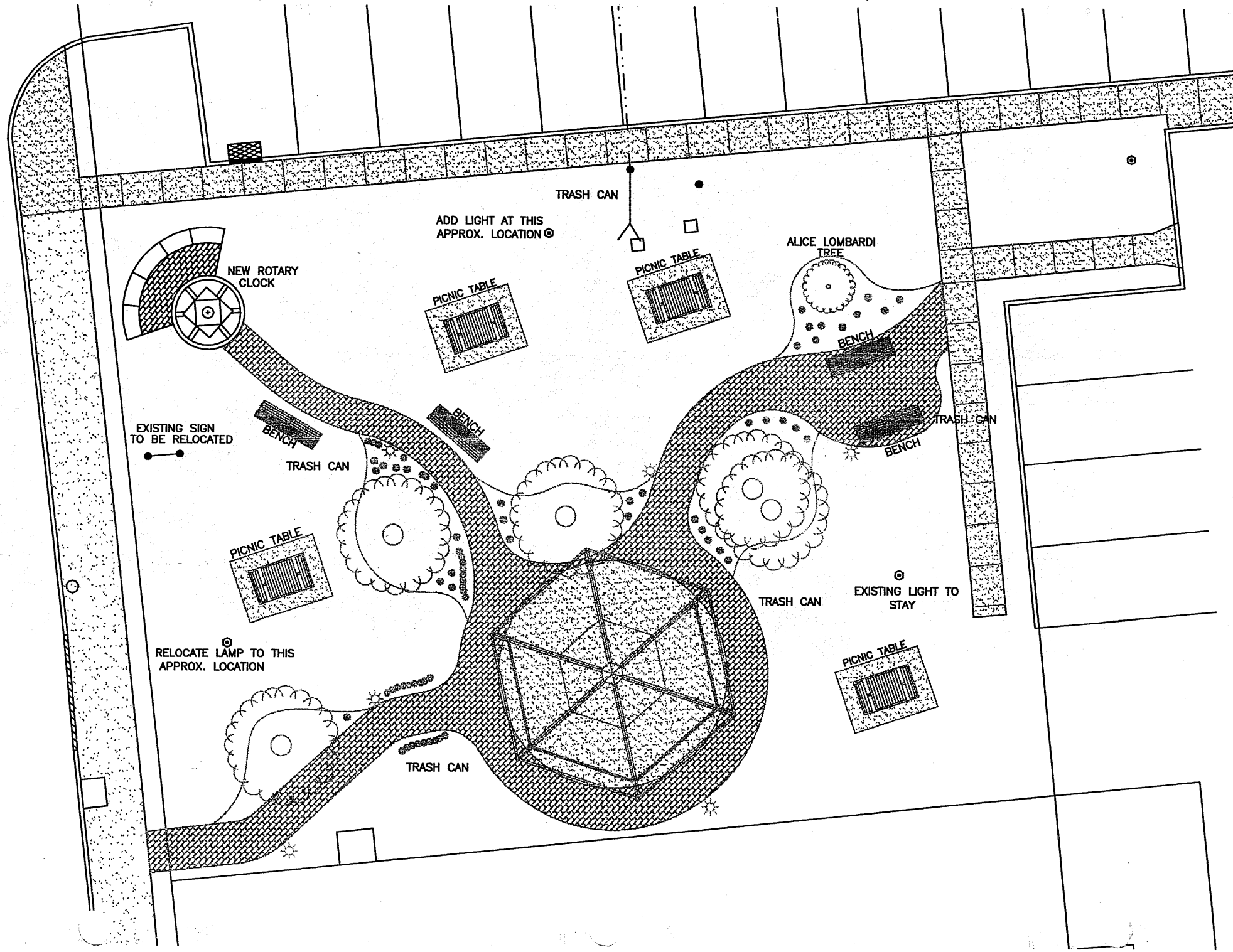
No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-3) Office;(DC-4) Office/Residential Transition;(DC-5) Residential



Lombardi Park and First Street Municipal Parking Lot


TRASH CAN
ADD LIGHT AT THIS APPROX. LOCATION
ALICE LOMBARDI TREE
NEW ROTARY CLOCK
PICNIC TABLE
PICNIC TABLE
BENCH
BENCH
BENCH
EXISTING SIGN TO BE RELOCATED
TRASH CAN
TRASH CAN
PICNIC TABLE
TRASH CAN
EXISTING LIGHT TO STAY
RELOCATE LAMP TO THIS APPROX. LOCATION
PICNIC TABLE
TRASH CAN

Town of Riverhead
Hamilton Municipal Parking Lot

SCTM NO. 0600-123-3-23

Property Size	20,691	SF
Parking Lot:	Yes	
Size	16,872.00	SF
Material	Asphalt	

estimated from GIS

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line adjacent

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	poor							
Swept Dates								
Quantity Removed (CY)								

Site Features		
	Yes	No
Playgrounds		x
Ball Fields		x
Docking Area		X
Boater Pumpout		X
Restroom Bldgs		X

Notes

Sanitary System Type n/a

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Hamilton Municipal Parking Lot
Stormwater Mangement
Parking Lot,
Future- consider reconstructing with either permeable pavers and/or rain gardens

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Nitrogen
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 123.-3-23

Property Information

SCTM# 123.-3-23 Site Address 324 Hamilton Ave City Riverhead Zip

Owner Information

Owner Name Town of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 30,000 Land Value 28,000 Acres 0.00 Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

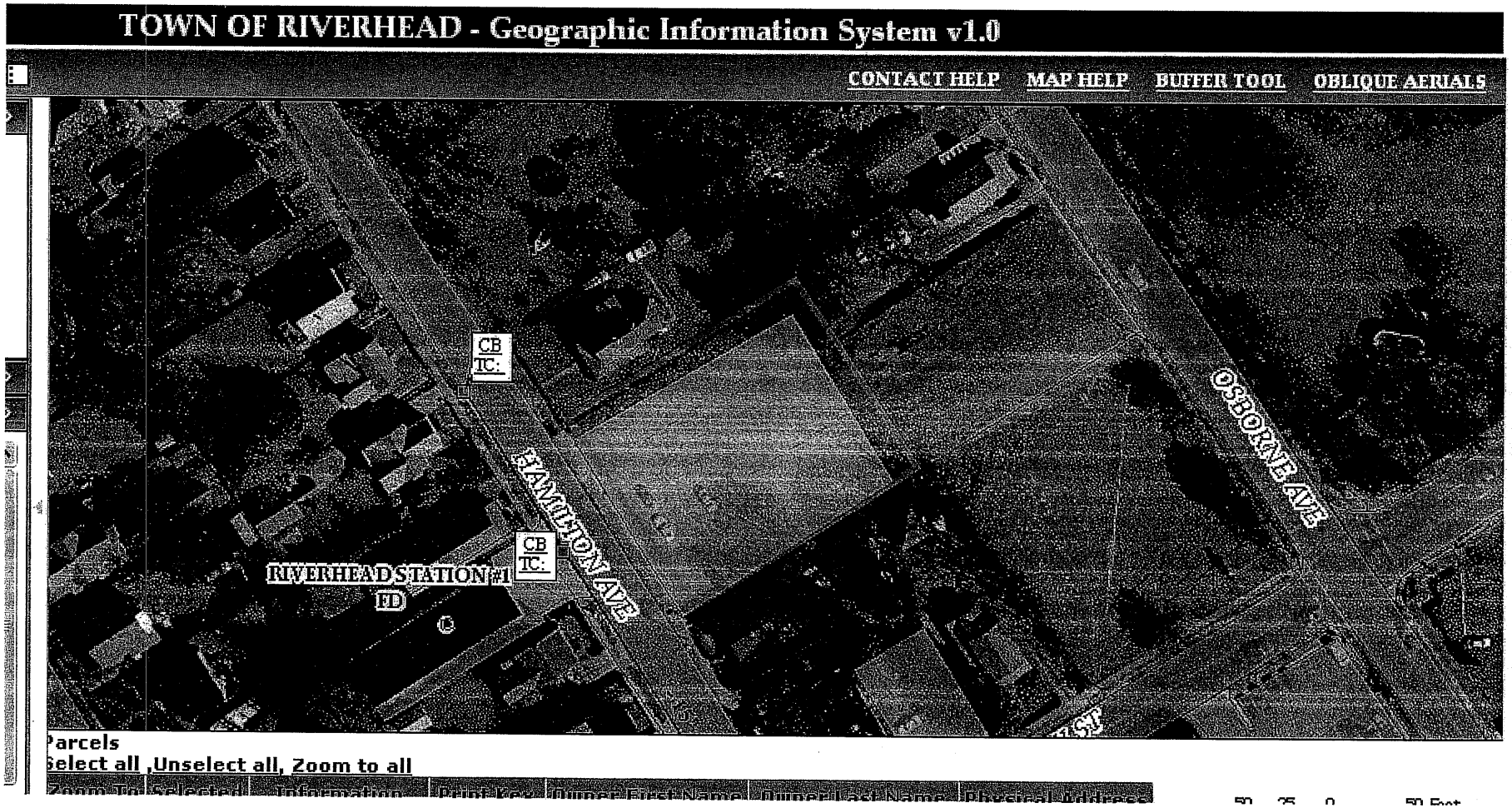
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RA40) Residence A-40;(VC) Village Center



Hamilton Avenue Parking Lot

Town of Riverhead
Peconic Riverfont and Municpal Park

SCTM NO. 0600-128-6-86.1 / 129.4.14 / 129.1.23

Property Size	4.16 /0.2 /1.40	Acres
Parking Lot:	yes	
Size	5.11	Acres
Material	Asphalt	

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line adjacent

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	months.
Playgrounds		x	
Ball Fields		x	
Docking Area	yes		24 power pedestals -potential 45 transient slips
Boater Pumpout	1		Holding Tank emptied on a regular basis by Sewer Department
Restroom Bldgs	1		

Sanitary System

Type Sewer District

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Peconic Riverfont and Municpal Park
Stormwater Mangement
Parking Lot,
Future- consider renovating islands as sunken stormwater islands

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility
Nitrogen
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

RIVERFRONT TOWN PARKING LOT
→ PARK

Property Information for SCTM# - 128.-6-86.1

Property Information

SCTM# 128.-6-86.1 | Site Address Peconic Ave | City Riverhead | Zip

Owner Information

Owner Name Town Of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 43,000 | Land Value 43,000 | Acres 4.16 | Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
EZ001	Empire Zone
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
PK301	Parking
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront

Property Information for SCTM# - 129.-4-14

Property Information

SCTM# 129.-4-14 | Site Address 321 E Main St | City Riverhead | Zip

Owner Information

Owner Name Town of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 89,000 | Land Value 75,000 | Acres 0.20 | Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront

Property Information for SCTM# - 129.-1-23

Property Information

SCTM# 129.-1-23 | Site Address McDermott Ave | City Riverhead | Zip

Owner Information

Owner Name Town Of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 46,200 | Land Value 35,800 | Acres 1.40 | Property Class Parking lot

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

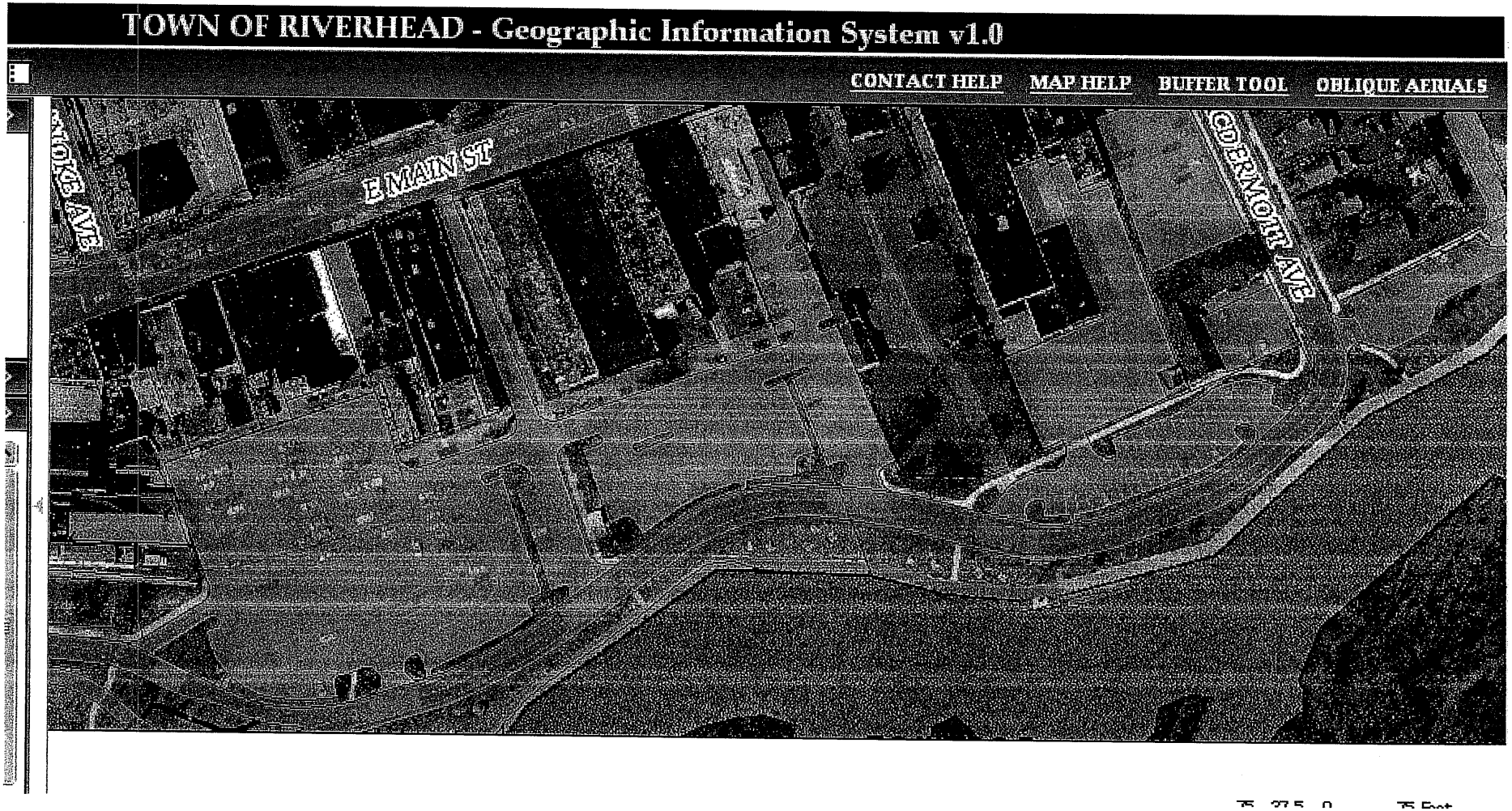
Exemption Code	Description
13500	TWN IN CO

Sales Information

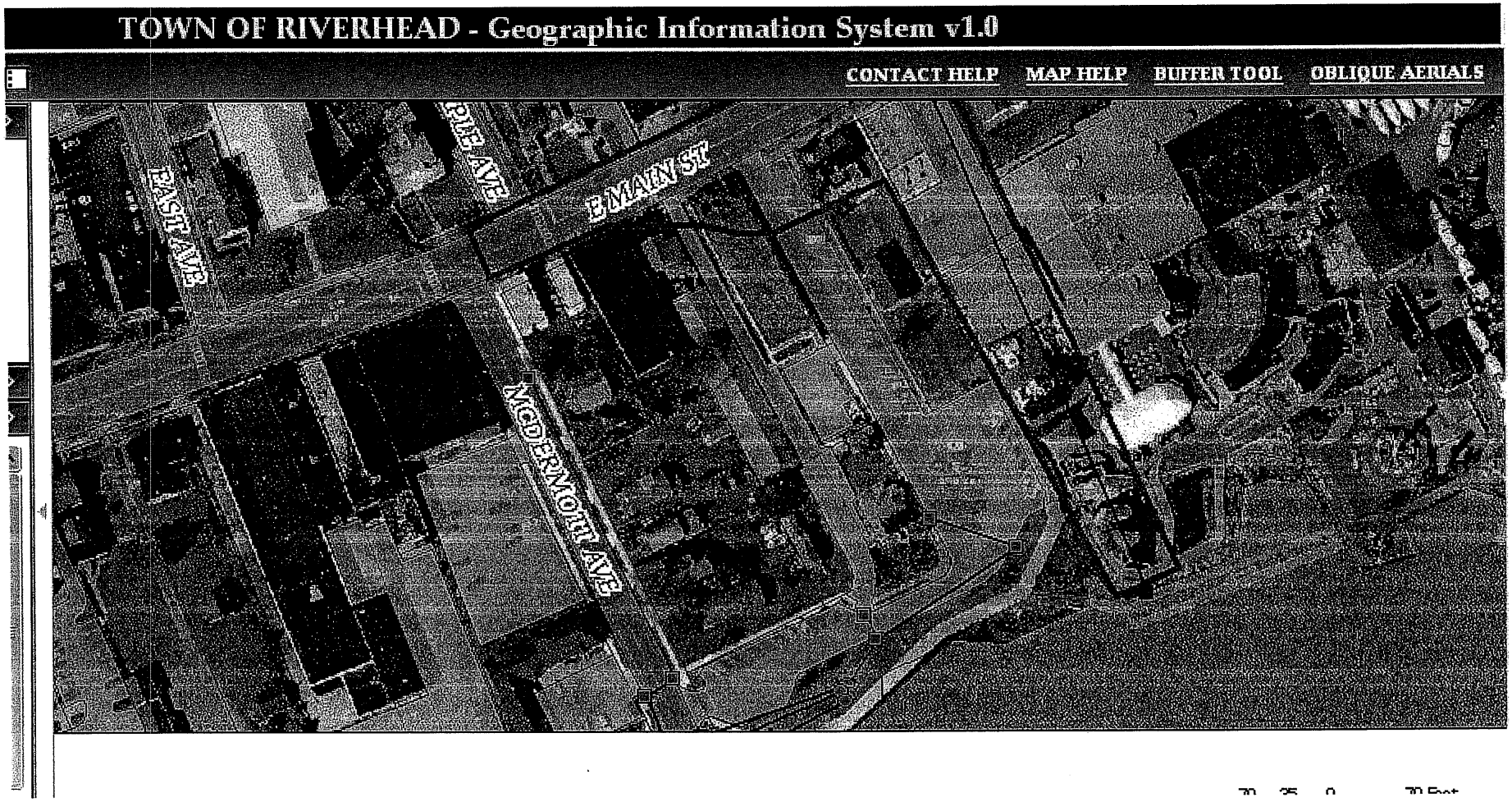
No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront



Peconic Riverfront, Municipal Parking Area


TOWN OF RIVERHEAD - Geographic Information System v1.0
CONTACT HELP
MAP HELP
BUFFER TOOL
OBLIQUE AERIALS
EAST AVE
PINE AVE
E MAIN ST
MCDERMOTT AVE

Waterfront Parks

Town of Riverhead
Meetinghouse Creek Pocket Park

SCTM NO. 0600-86-1-41

Property Size	0.12	Acres
Parking Lot:	Yes	
Size	3,330	SF
Material	Asphalt	

Local Water Bodies: yes

Type: Meetinghouse Creek

Distance to Property Line
0 east

Winter Road Main. NO

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	0	
Ball Fields	0	
Tennis Courts	0	
Hanball Courts	0	
Restroom Bldgs	0	

Notes

Park is passive in nature with a 7 car parking lot. When it was constructed it included six 10' dia x 3' leaching rings.

Sanitary System

Type N/A

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Property Information for SCTM# - 86.-1-41

Property Information

SCTM# 86.-1-41 Site Address Hubbard Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 6,400 Land Value 6,400 Acres 0.12 Property Class

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SC001	Scavenger waste dist
WD336	Water ext 27

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB40) Residence B-40

Town of Riverhead
Iron Pier Beach, 344 Pier Avenue, Jamesport

SCTM NO. 0600-08-4-14.1

Property Size		Acres
Parking Lot:	Yes	
Size		SF
Material	Asphalt	

Local Water Bodies: Yes

Type: Long Island Sound and Freshwater wetlands

Distance to Property Line

Within property

Winter Road Main. NO

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds		x	2010-playground was removed due to deterioration
Ball Fields		x	
Tennis Courts		x	
Hanball Courts		x	
Office Building		x	
Restroom Bldgs		1	

Sanitary System

Type Septic

Sanitary System Maintenance								
2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**

Potable Water Supply

RWD								
HVAC System								
Unit Type								
Fuel Type								
HVAC System								
Unit Type								
Fuel Type								

Fertlizer/Pesticide Usage

Location Placed Not Utilized

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Property Information for SCTM# - 8.-4-14.1

Property Information

SCTM# 8.-4-14.1 Site Address Pier Ave City Jamesport Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 62,100 Land Value 62,100 Acres 16.60 Property Class

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD304	Jamesport fire
LT301	Light district
SC001	Scavenger waste dist

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

les Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
05/01/1986	05/08/1986	10033	00527	$1.00	Town Of Riverhead

Zoning Information

Code (RA80) Residence A-80;(RA40) Residence A-40

Town of Riverhead
Grangebel Park and West Main Street Comfort Station

SCTM NO. 0600-128-3-72.7

Property Size	3.3	Acres
Parking Lot:	N/A	
Size		Acres
Material		

Local Water Bodies: Yes

Type: Peconic River

Distance to Property Line
390' to the SW

Winter Road Main. No

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds		x
Ball Fields		x
Basketball Court		x
Tennis Courts		x
Restroom Bldgs	1	

Notes

Earthern Berm Dam with two spillways

2009- The Town performed structural repairs on the North Spillway

2009- The ToR through Grant monies converted the south spillway into a fish passage

2010 - the ToR through Grant monies performing site improvements - bulkheading, bridges, landscaping

Sanitary System

Type Sewer District

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Grangebel Park and West Main Street Comfort Station
Stormwater Mangement
Parking Lot,

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

Trash

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

2010 Capital Site Improvement Project will incorporate trash rack at Bridal Veils Falls

Property Information for SCTM# - 128.-3-72.1

Property Information

SCTM# 128.-3-72.1 Site Address 73-79 Peconic Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 187,300 Land Value 187,300 Acres 3.30 Property Class

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
BD001	Bus imprvment dist1
FD302	Rvrhd fire zone 1
HD901	Rhd Hist District
LM001	Landmark
LT301	Light district
PK301	Parking
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

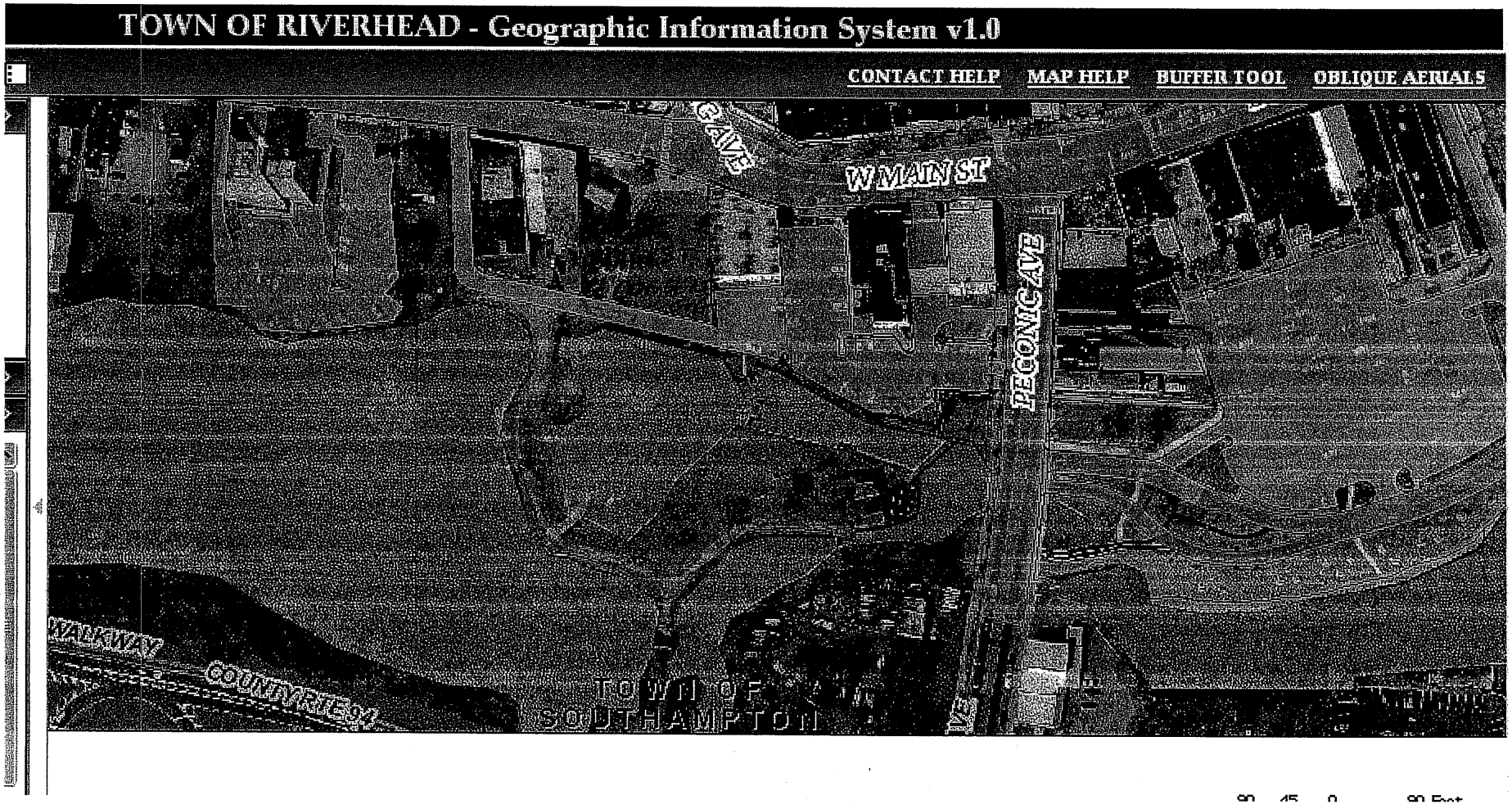
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (DC-1) Main Street;(DC-2) Waterfront;(DC-3) Office



Grangebel Park, Riverhead

Town of Riverhead
Wading River Duck Ponds & Municipal Parking Field

SCTM NO. 0600-56-1-2/ 0600-49-2-14

Property Size	.25/0.53	Acres
Parking Lot:	Separate Paved	
Size	17,980	SF
Material	Asphalt	

Local Water Bodies: DEC ID W-9

Type: Freshwater Ponds

Distance to Property Line

0

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	0	
Ball Fields	0	
Basketball Court	0	
Hanball Courts	0	
Restroom Bldgs	0	

Notes

TOR & TOB share Duck Ponds, 2005 IMA in process of being updated for a capital improvement to dredge ponds, rebulkhead and perform upland stormwater management improvements

Sanitary System

Type N/A

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Wading River Duck Ponds & Municipal Parking Field
Stormwater Mangement

Parking Lot,

Create permeable paver parking area and construct bio swales

Pesticide Use

Fertilizer Use

Potential Pollutants of Conerns at this Facility

Wild Waterfowl feces
Trash
Sediment from failing bulkheads and road runoff

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 56.-1-2

DUCK PONDS

Property Information

SCTM# 56.-1-2 Site Address N Wading River Rd City Wading River Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value Land Value Acres 0.25 Property Class Park

Special District Information

Code	Special District
LB001	North Shore Pub Lbry
SC001	Scavenger waste dist
WD347	Water ext 35

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB80) Residence B-80

PARKING AREA 17978.23

DUCK PONDS MUNICIPAL PARKING FIELD

Property Information for SCTM# - 49.-2-14

Property Information

SCTM# 49.-2-14 | Site Address 2016 N Country Rd | City Wading River | Zip

Owner Information

Owner Name Town of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 11,000 | Land Value 11,000 | Acres 0.53 | Property Class Parking lot

Special District Information

Code	Special District
LB001	North Shore Pub Lbry
SC001	Scavenger waste dist
WD347	Water ext 35

Tax Exemption Information

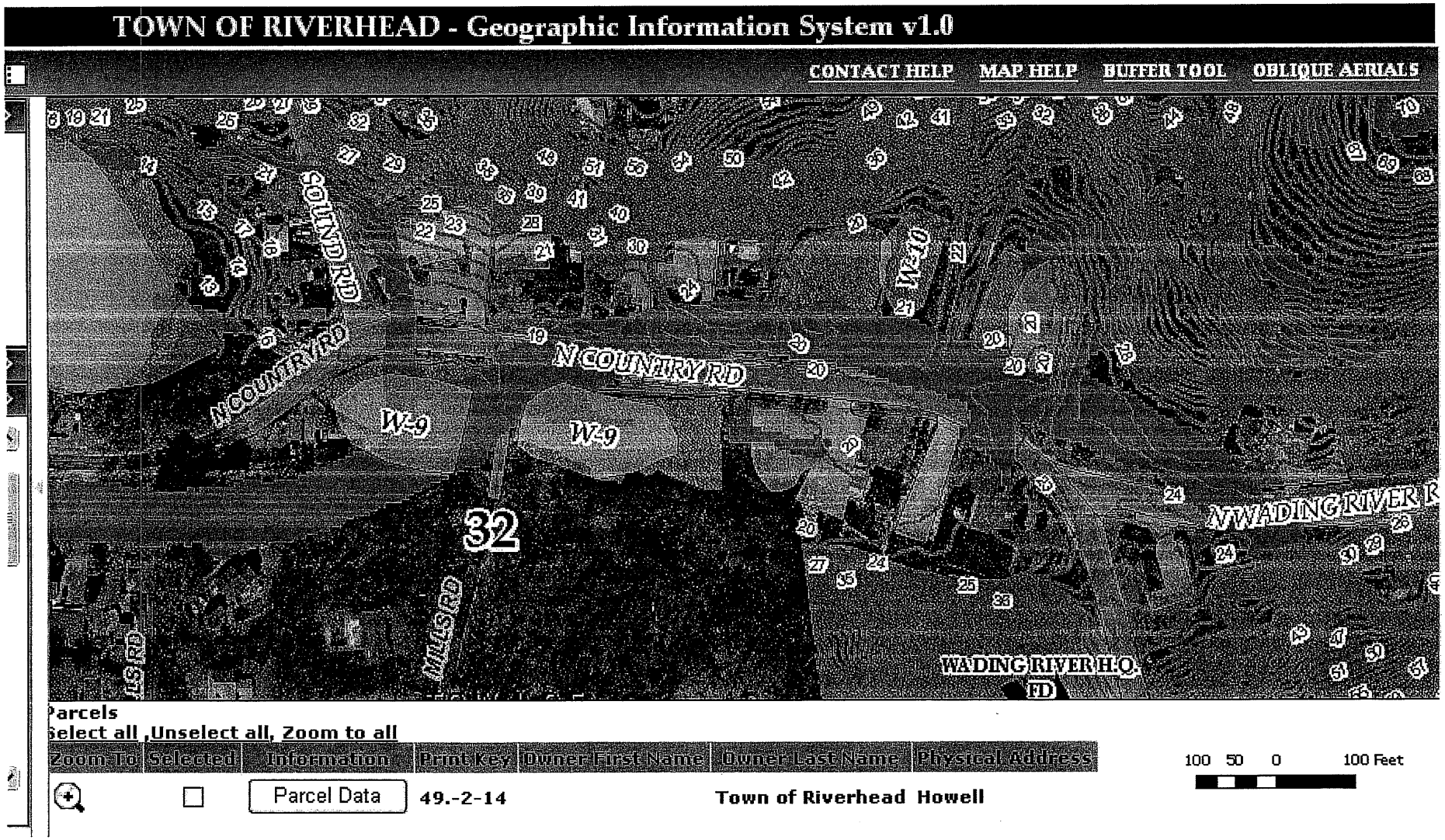
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (HC) Hamlet Center



Wading River Duck Ponds and Municipal Parking Lot

Town of Riverhead
East Creek Docking Facility

SCTM NO. 0600-94-2-1 69 Town Beach Road

Property Size	2	Acres
Parking Lot:	yes	
Size	30,770.68	SF
Material	Blue Stone	

Local Water Bodies: Yes

Type: East Creek & Peconic Bay

Distance to Property Line Adjacent

Winter Road Main. Plowed for Access to docks

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds		x
Ball Fields		x
Basketball Court		x
Tennis Courts		x
Restroom Bldgs	1	

Notes

2010 Capital improvement project to remove 4 dilapidated play units and replace with one large play unit

Sanitary System Yes Located in back side of the Snack Shack Bldg.

Type Septic

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	2010	2011	2012	2013	2014	2015	2016	2017
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	2011	2012	2013	2014	2015	2016	2017
Refuse								
Bottle Recycling								

Best Management Practice Selection
East Creek Docking Facility
Stormwater Mangement
Parking Lot,

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility
Boater Sanitary Waste
Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

FEAST CREEK DOCKING FACILITY

Property Information for SCTM# - 94.-2-1

Property Information

PARKING = 30,770.68

SCTM# 94.-2-1 | Site Address 69 Town Beach Rd | City Jamesport | Zip

Owner Information

Owner Name Town Of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 75,000 | Land Value 29,600 | Acres 2.00 | Property Class Marina

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD304	Jamesport fire
LT301	Light district
SC001	Scavenger waste dist
WD340	Water ext 32j

Tax Exemption Information

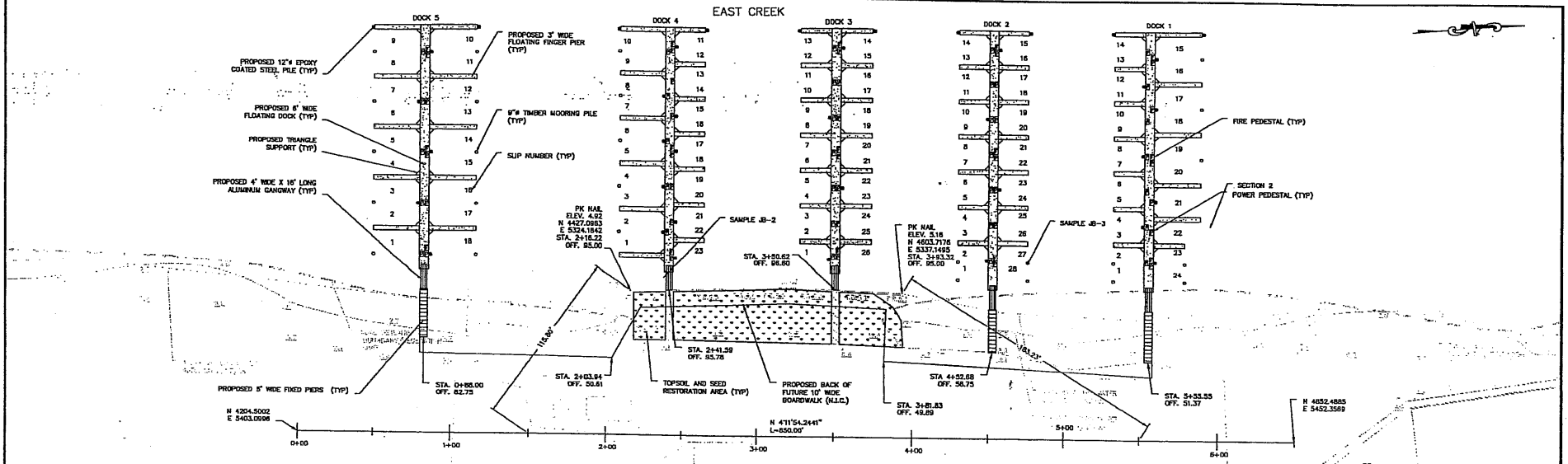
Exemption Code	Description
13500	TWN IN CO

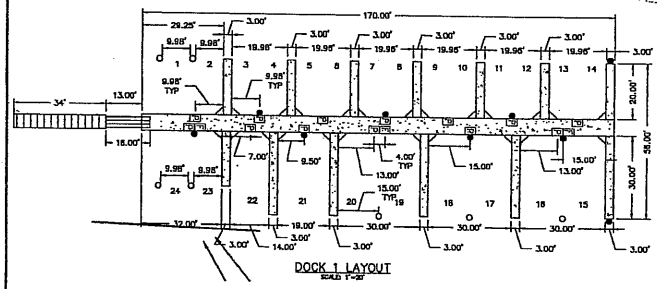
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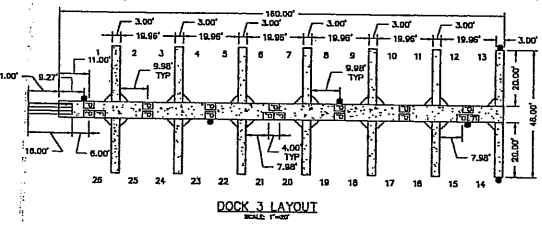
No Sale Data available

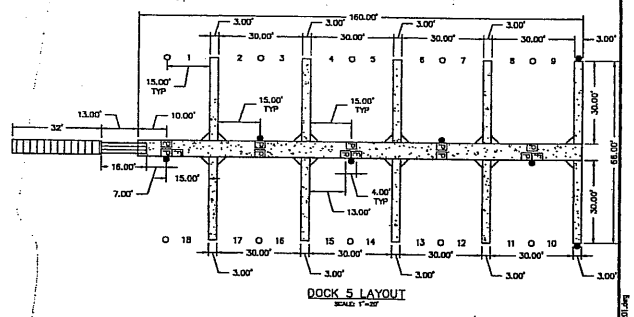
Zoning Information

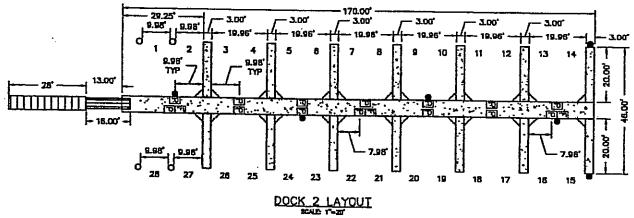
Code (RB40) Residence B-40

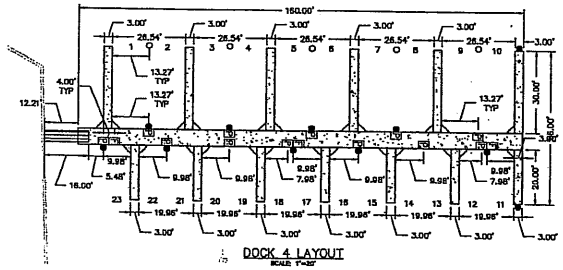












LEGEND
- TIMBER MOORING PILE
- EPOXY COATED STEEL PILE
- FIRE PEDESTAL
- POWER PEDESTAL

COORDINATION NOTES:

1. FLOATING DOCKS SHALL BE FURNISHED BY THE TOWN THROUGH A PROCUREMENT CONTRACT, AND INSTALLED BY THE CONTRACTOR. SEE TECHNICAL SPECIFICATION 10050 FOR DESCRIPTION OF MANUFACTURER AND CONTRACTOR RESPONSIBILITIES.

GENERAL NOTES:

1. SEE DRAWING NO. E201 FOR ELECTRICAL PLAN.
2. SEE DRAWING NO. P201 FOR PLUMBING PLAN.
3. SEE DRAWING NO. C901 AND C902 FOR MISCELLANEOUS SITE DETAILS.

20 0 20 40 60
SCALE: 1" = 20'

Cashin Associates, P.C.
ENGINEERING • PLANNING • CONSTRUCTION MANAGEMENT
1200 Veterans Memorial Highway • Hauppauge, New York 11788 • 631.348.7600
601 Brickell Key Drive • Miami, Florida 33131 • 305.470.2004

NO.	DATE	DESCRIPTION

TOWN OF RIVERHEAD
SUFFOLK COUNTY, NEW YORK

EAST CREEK MARINA
IMPROVEMENT PLAN – PHASE 1
INFRASTRUCTURE IMPROVEMENTS AND FLOATING DOCK INSTALLATION

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM OF THIS DRAWING IN ANY WAY. IF ANY ENGINEER ALTERS THIS DRAWING, HE SHALL AFFIX TO THE DRAWING HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DATE	MARCH, 2006
DESIGNED BY	J.F.
DRAWN BY	J.F.
CHECKED BY	J.L.
SCALE	

SITE PLAN

7031-100
DRAWING NUMBER
C201

I:\TOWN OF RIVERHEAD\7031-100-East Creek Marina\Cad\7031-100-C201.dwg

Town of Riverhead
South Jamesport Beach

SCTM NO.	0600-69-3-39	
Property Size	19	Acres
Parking Lot:	yes	
Size	45,886.85	SF
Material	Asphalt	

Local Water Bodies: Yes

Type: Peconic Bay

Distance to Property Line Adjacent

Winter Road Main. Plowed for Access to Blower Bldg

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	x	
Ball Fields		x
Basketball Court	1	
Tennis Courts	2	
Restroom Bldgs	1	

Notes

2010 Capital improvement project to remove 4 dilapidated play units and replace with one large play unit

Sanitary System Yes

Type Septic

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
South Jamesport Beach
Stormwater Mangement
Parking Lot,
Consider in the future constructing a permeable paver parking lot with salt water tolarate plantings

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

S, Jamesport Beach

Property Information for SCTM# - 69.-3-39

45886.85sf

Property Information

SCTM# 69.-3-39 | Site Address Peconic Bay Blvd | City Jamesport | Zip

Owner Information

Owner Name Town Of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 29,600 | Land Value 29,600 | Acres 19.00 | Property Class Imprvd beach

Special District Information

Code	Special District
FD304	Jamesport fire
AM001	Rvrhd ambulance dist
LT301	Light district
SC001	Scavenger waste dist
WD340	Water ext 32j

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB40) Residence B-40

TOWN OF RIVERHEAD - Geographic Information System v1.0

CONTACT HELP MAP HELP BUFFER TOOL OBLIQUE AERIALS

Tasks

SELECT
Search by Address
Search SCTM#
Search by Last Name
Print
Search Place

Results

Layers

- Layers
  - Hover Tips
  - Ground Water Infrastructu
  - Sewer District Infrastructu
  - Water District Infrastructu
  - FEMA Flood Hazard (adopt
  - Environmental
  - Infastructure
  - Overlay/Boundaries
  - Basemap
  - Aerials
  - Town Boundaries



Town of Riverhead
South Jamesport Boat Launch

SCTM NO. 0600-94-1-7 1207 Peconic Bay Blvd.

Property Size	17.4	Acres
Parking Lot:	yes	
Size	128,645.00	SF
Material	Asphalt	

Local Water Bodies: Yes

Type: East Creek & Peconic Bay

Distance to Property Line Adjacent

Winter Road Main. Plowed for Emergency Access

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Average							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds		x
Ball Fields		x
Basketball Court		x
Tennis Courts		x
Boater Pumpout	x	

Notes

2010 Capital improvement project to remove 4 dilapidated play units and replace with one large play unit

Sanitary System Yes

Type Holding Tank pumped out by our Scavenger Sewer

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	2010	2011	2012	2013	2014	2015	2016	2017
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	2011	2012	2013	2014	2015	2016	2017
Refuse								
Bottle Recycling								

Best Management Practice Selection
South Jamesport Boat Launch
Stormwater Mangement

Parking Lot,

Have 2008 permit for renovation of parking lot into permeable pavers,

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

Boater Sanitary Waste
Trash
Petroleum
Sediment from failing bulkheads - ToR has 2008 NYSDEC permit for site renovations

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 94.-1-7

Property Information

PARKING 134927 SF - 6281.9 s = 128645 #

SCTM# 94.-1-7 | Site Address 1207 Peconic Bay Blv | City Jamesport | Zip

Owner Information

Owner Name Town Of Riverhead | Additional Owner Info

Street Address 200 Howell Ave | City Riverhead | Zip 11901

Assessment Information

Total Value 135,300 | Land Value 135,300 | Acres 17.40 | Property Class Marina

Special District Information

Code	Special District
SC001	Scavenger waste dist
WD340	Water ext 32j

Tax Exemption Information

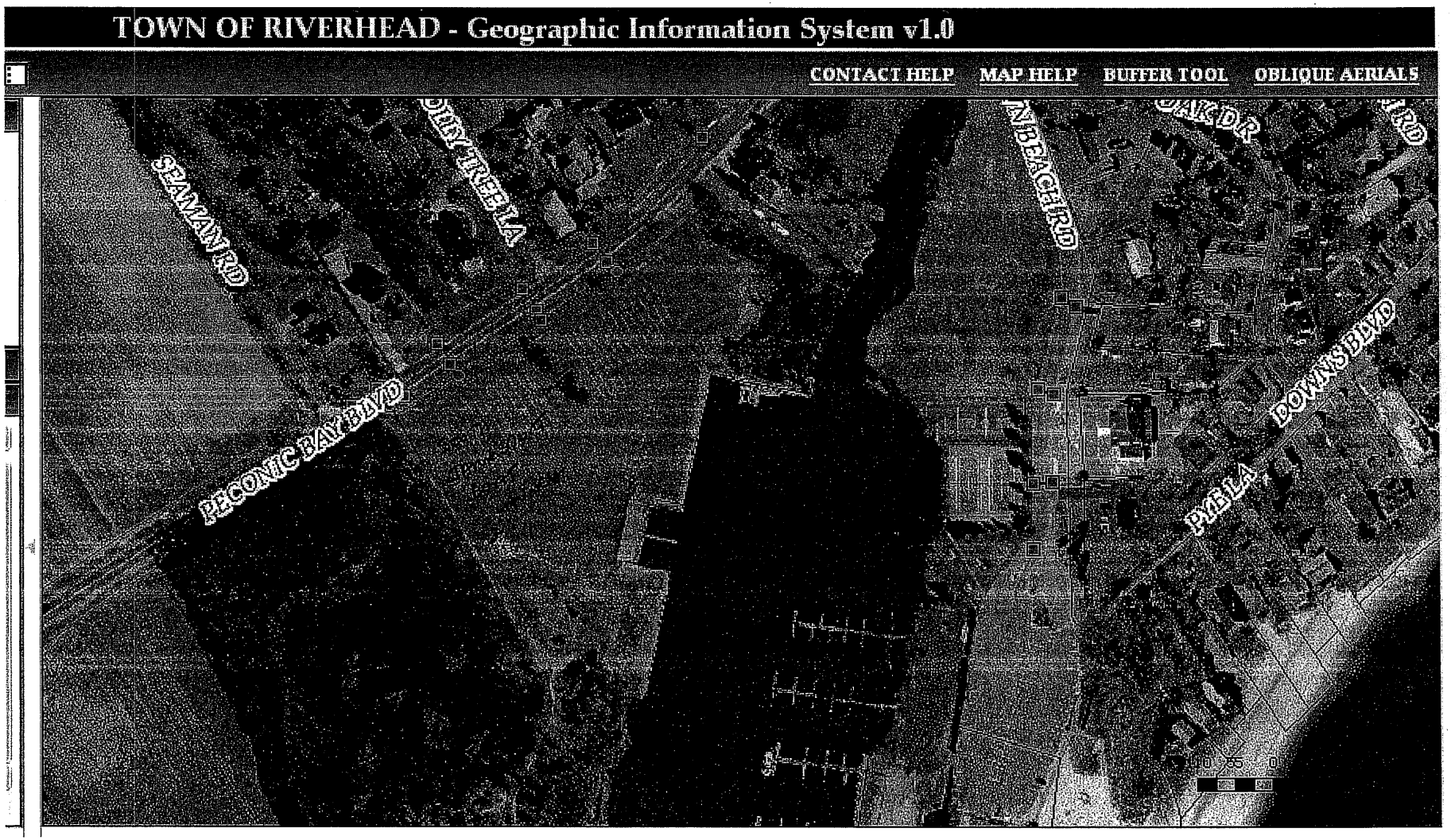
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RB40) Residence B-40



East Creek Docking Facility/South Jamesport Beach/Jamesport Boat Ramp

Town of Riverhead
Reeve's Beach, Riverhead

SCTM NO. 0600-16-1-16

Property Size	13.6	Acres
Parking Lot:	yes	
Size	15,813.00	SF
Material	Asphalt	

Local Water Bodies: Yes

Type: Long Island Sound

Distance to Property Line Adjacent

Winter Road Main. Plowed for Emergency Access

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Basketball Court		x	
Tennis Courts		x	
Restroom Bldgs	1		

Sanitary System Yes

Type Septic

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Reeve's Beach, Riverhead
Stormwater Mangement
Parking Lot,
Consider in the future constructing a permeable paver parking lot with salt water tolarate plantings

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Capital Improvement
Replace dilapidated restroom building with energy efficient pre-fabricated restroom

Property Information for SCTM# - 16.-1-16

Property Information

SCTM# 16.-1-16 **Site Address** Reeves Park **City** Riverhead **Zip**

Owner Information

Owner Name Riverhead Town Park **Additional Owner Info**

Street Address 200 Howell Ave **City** Riverhead **Zip** 11901

Assessment Information

Total Value 62,400 **Land Value** 62,400 **Acres** 13.60 **Property Class** Res vac land

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SC001	Scavenger waste dist
WD335	Water ext 23

Tax Exemption Information

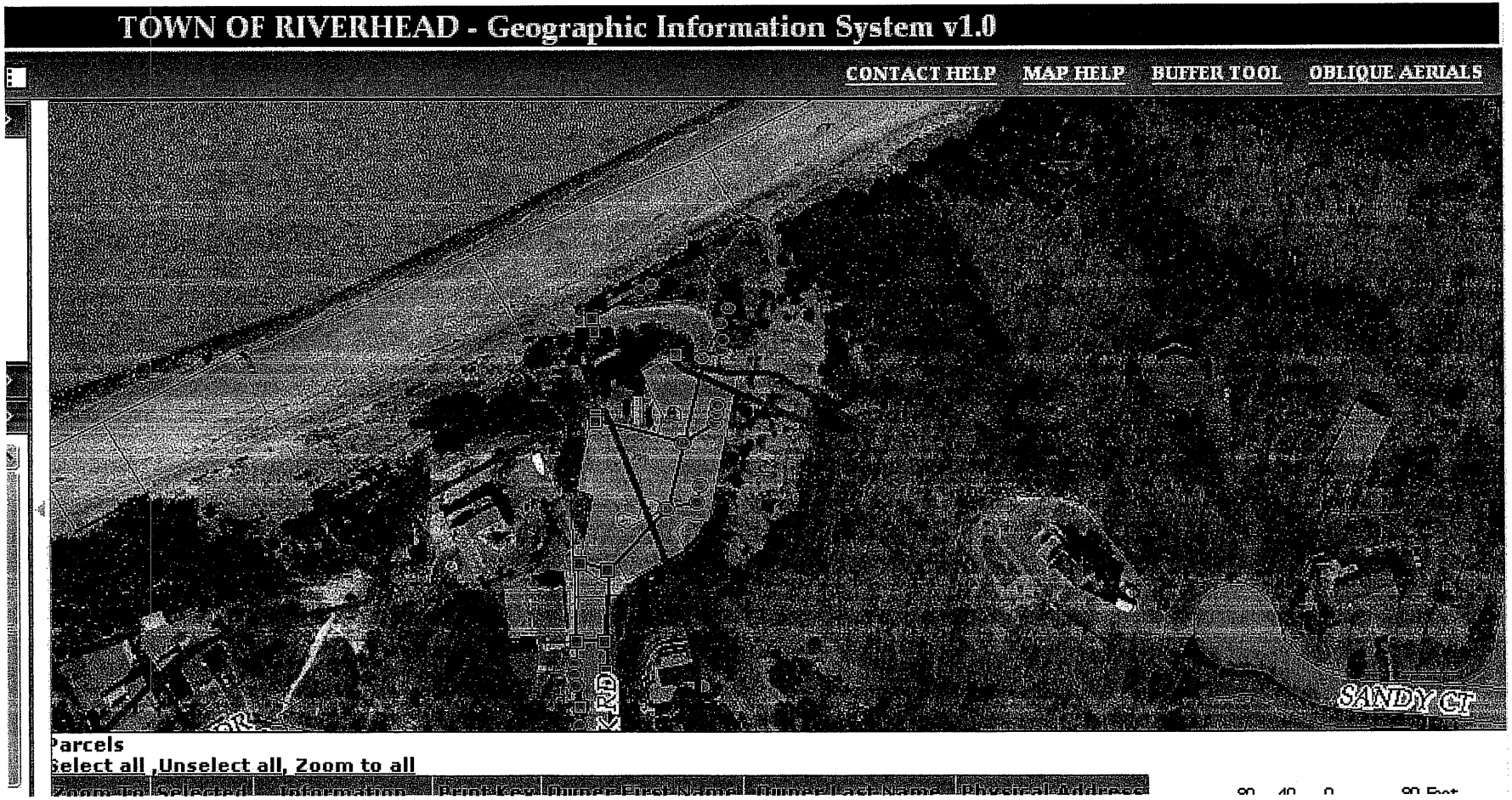
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RA40) Residence A-40



Reeve's Beach, Riverhead

Recreational Parks

Town of Riverhead
Riley Avenue 911 Memorial

Wading River

SCTM NO. 0600-99-1-11.4

Property Size	No info	Acre			
Parking Lot:	No		Building	No	
Size		SF	Size		SF
Material					

Local Water Bodies: No

Type: Adjacent to Recharge Basin

Distance to Property Line

567' to the south

Winter Road Main. No.

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Satisfactory							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Ball Fields		x	
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs		x	

Sanitary System Type

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Riley Avenue 911 Memorial
Stormwater Mangement
Parking Lot,
Consider permeable pavers and sunken islands for stormwater infiltration

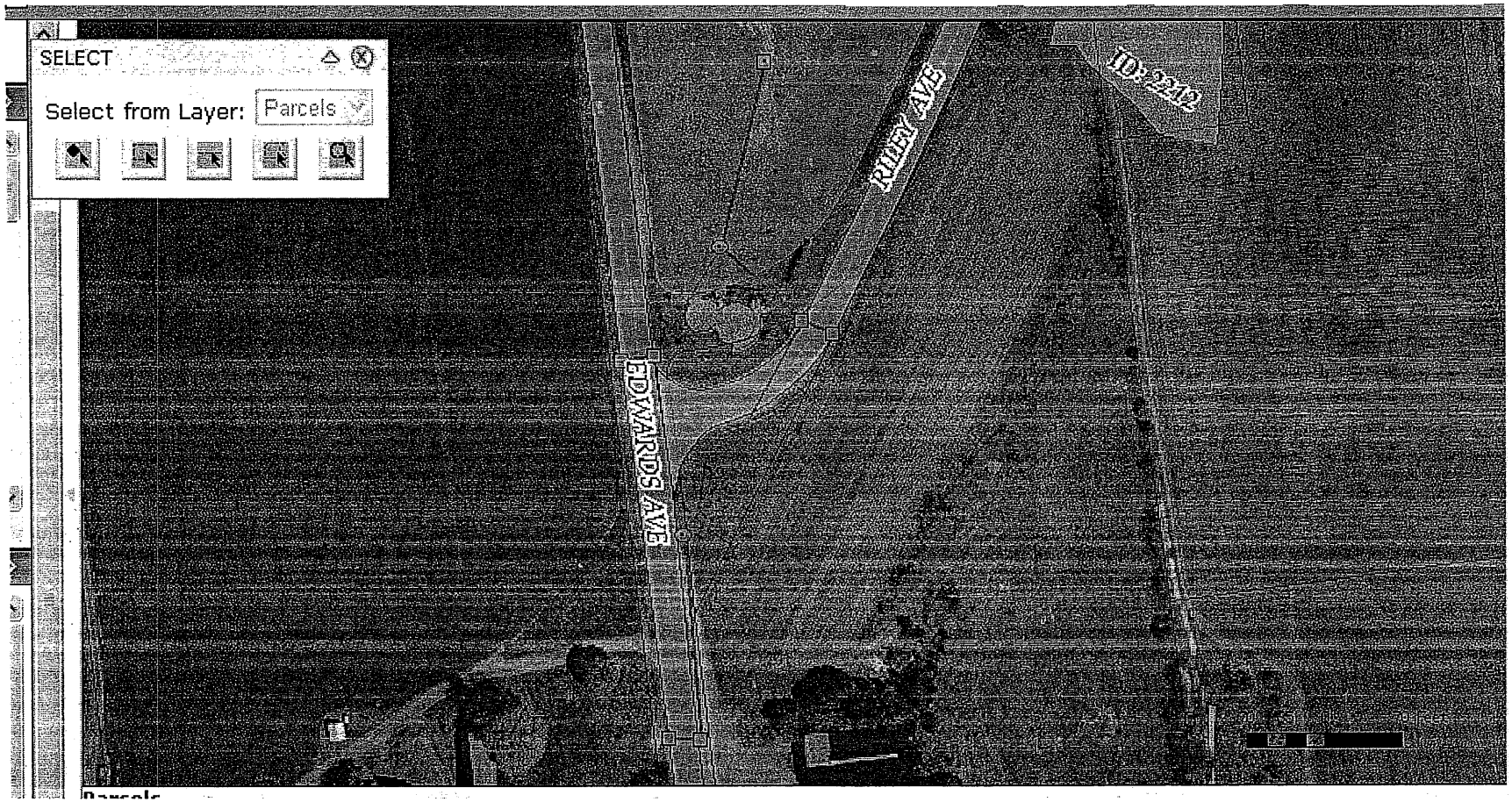
Pesticide Use Yes

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl



Calverton – Riley Avenue 911 Memorial

Town of Riverhead
Grumman Air Memorial

SR 25 Calverton

SCTM NO. 0600-135-1-p/o 7.33

Property Size	2.5	Acre			
Parking Lot:	Yes		Building	Yes	
Size	9,258.00	SF	Size	1,140.0	SF
Material	Asphalt		2 Mobile Home		

Winter Road Main. Yes

Yes

Local Water Bodies: Not surface

Type: Freshwater Wetlands

Distance to Property Line

Adj to NYSDEC ID 2011 - Dry

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Site Features			**Notes**
	Yes	No	
Playgrounds		x	
Memorial Planes	x-2		
Docking Area		X	
Boater Pumpout		X	
Restroom Bldgs		x	

Sanitary System No

Type N/A

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Grumman Air Memorial
Stormwater Mangement
Parking Lot,
Consider future permable paver parking lot

Pesticide Use N/A

Fertilizer Use Yes

Potential Pollutants of Conerns at this Facility

Trash
Petroleum

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 135.-1-7.33

Property Information

SCTM# 135.-1-7.33 Site Address Grumman Blvd City Calverton Zip

Owner Information

Owner Name Community Dev Agency Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 29,752,900 Land Value 29,706,200 Acres 1980.10 Property Class Industrial

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD301	Wading river fire
FD302	Rvrhd fire zone 1
FD305	Manorville fire
LT301	Light district
SC001	Scavenger waste dist

Tax Exemption Information

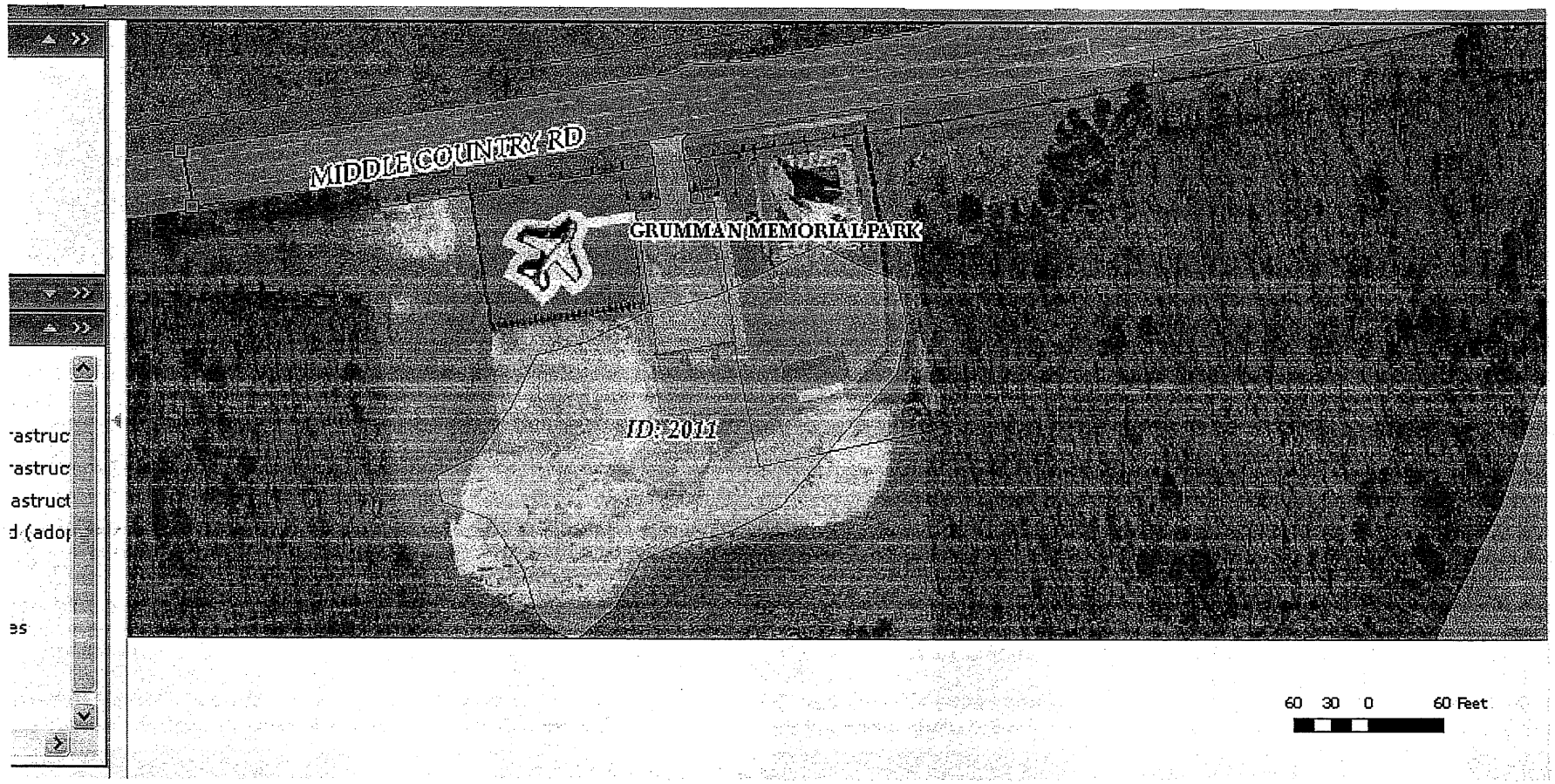
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (NRP) Natural Resources Protection;(PIP) Planned Industrial Park;(CO) Calverton Office;(LI) Light I



Grumman Airplane Memorial Park

Town of Riverhead
Enterprise Park at Calverton

SCTM NO. 0600-135-1-7.33

Property Size	62	Acres
Parking Lot:	No	
Size		SF
Material		

Local Water Bodies: No

Type:

Distance to Property Line

If

Winter Road Main. NO

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds			
Ball Fields	4		Constructed in 2008; 2010 not open to public due to permit issues.
Tennis Courts			
Hanball Courts			
Office Building			
Restroom Bldgs			

Sanitary System

Type Septic

Sanitary System Maintenance								
2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**

Potable Water Supply

RWD								
HVAC System								
Unit Type								
Fuel Type								
HVAC System								
Unit Type								
Fuel Type								
HVAC System								
Unit Type								
Fuel Type								

Fertlizer/Pesticide Usage

Location Placed Baseball Fields

Year Placed:	2010	2011	2012	2013	2014	2015	2016	2017
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	2011	2012	2013	2014	2015	2016	2017
Refuse								
Bottle Recycling								

Best Management Practice Selection
Enterprise Park at Calverton
Stormwater Mangement
Parking Lot,

Pesticide Use

Grubbs only in ballfield areas

Fertilizer Use

Fertilize only Ballfield outfield area
Follow NYSDEC regulations regarding proper Fertlizer Applications
Do not deploy fertlizers within 3 days of forecasted rain.

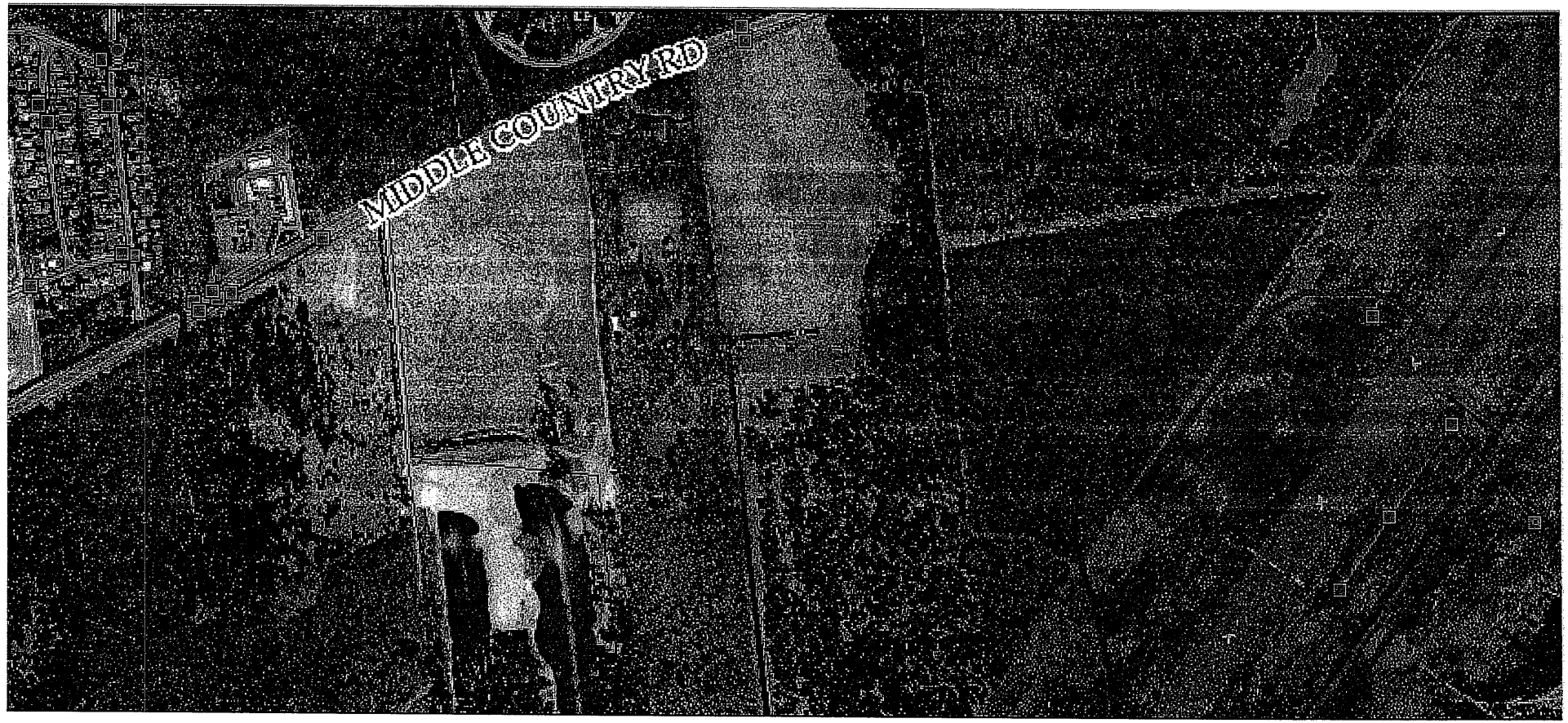
Potential Pollutants of Conerns at this Facility

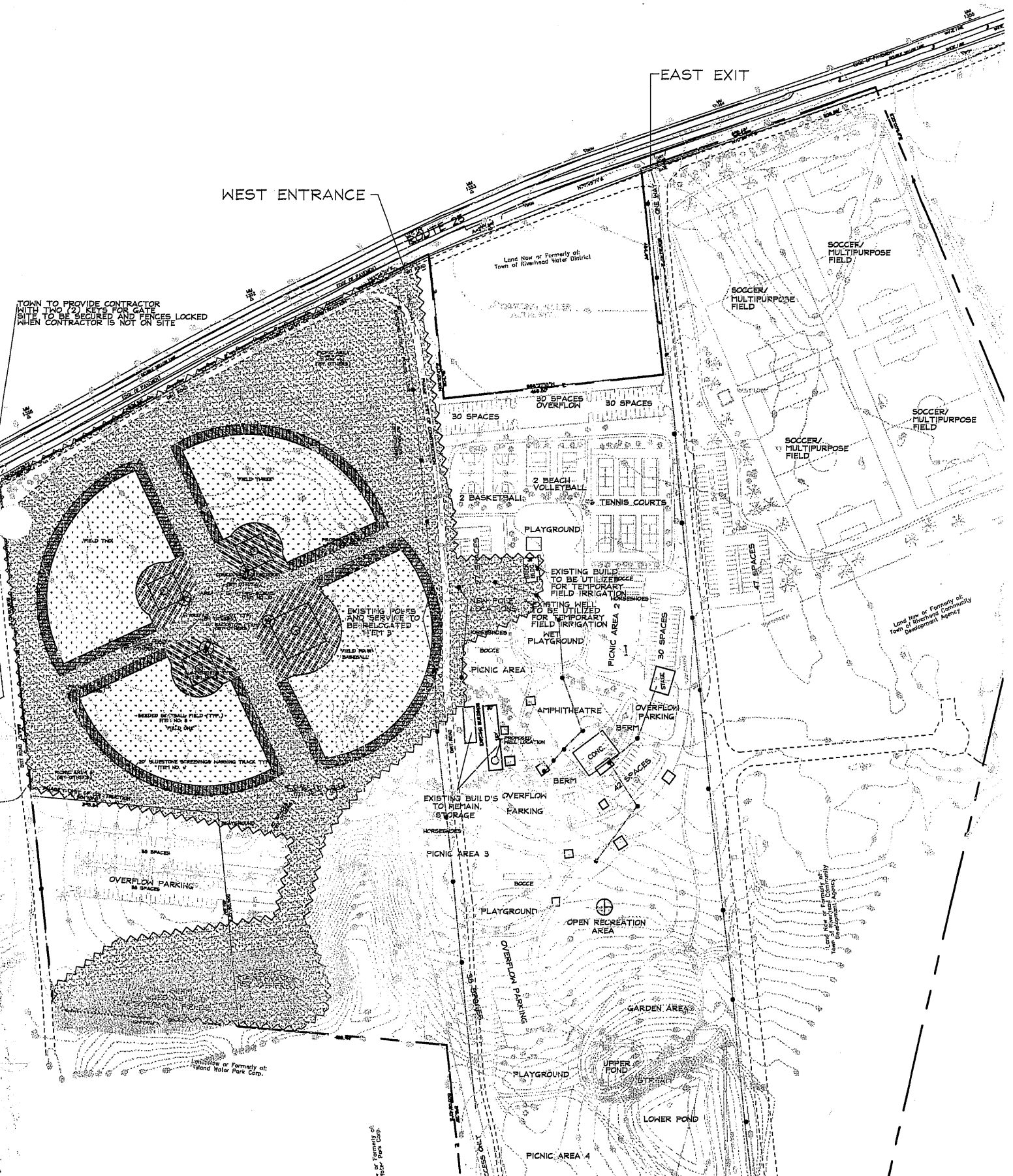
Sediment from eroded slopes
Trash

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List

Town of Riverhead
Enterprise Park at Calverton – Recreational Facility




EAST EXIT
WEST ENTRANCE
ROUTE 25
TOWN TO PROVIDE CONTRACTOR WITH TWO (2) KEYS FOR GATE. SITE TO BE SECURED AND FENCES LOCKED WHEN CONTRACTOR IS NOT ON SITE
Land Now or Formerly of: Town of Riverhead Water District
SOCCER/ MULTIPURPOSE FIELD
SOCCER/ MULTIPURPOSE FIELD
SOCCER/ MULTIPURPOSE FIELD
SOCCER/ MULTIPURPOSE FIELD
30 SPACES OVERFLOW
30 SPACES
30 SPACES
2 BEACH VOLLEYBALL
2 BASKETBALL
5 TENNIS COURTS
PLAYGROUND
47 SPACES
EXISTING BUILD. TO BE UTILIZED FOR TEMPORARY FIELD IRRIGATION
EXISTING WELL TO BE UTILIZED FOR TEMPORARY FIELD IRRIGATION
NEW POLE LOCATIONS
EXISTING POLES AND SERVICE TO BE RELOCATED
WET PLAYGROUND
PICNIC AREA 2
30 SPACES
PICNIC AREA
AMPHITHEATRE
OVERFLOW PARKING
BERM
CONC.
42 SPACES
BERM
EXISTING BUILD'S TO REMAIN. STORAGE
OVERFLOW PARKING
PICNIC AREA 3
OVERFLOW PARKING
36 SPACES
PLAYGROUND
OPEN RECREATION AREA
OVERFLOW PARKING
GARDEN AREA
PLAYGROUND
UPPER POND
LOWER POND
PICNIC AREA 4
YIELD THREE
YIELD TWO
YIELD FOUR BASEBALL
SEEDED SOFTBALL FIELD (TYP.)
30' BLUESTONE SCREENINGS WARNING TRACK TYP.
Land Now or Formerly of: Town of Riverhead Community Development Agency
Land Now or Formerly of: Town of Riverhead Community Development Agency
Land Now or Formerly of: Island Water Park Corp.
Land Now or Formerly of: Island Water Park Corp.

Town of Riverhead
Horton Avenue Park

SCTM NO. 0600-81-2-54.1

Property Size		Acres
Parking Lot:	Informal	
Size		SF
Material	earth	

Local Water Bodies: DEC ID 2413

Type: Surface water

Distance to Property Line

353' North east

Winter Road Main. NO

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Good							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	1	
Ball Fields	0	
Basketball Court	1	
Hanball Courts	0	
Restroom Bldgs	0	

Notes

2008 Capital Improvement to add the park, 2009 Town installed VCLF around playground

Sanitary System

Type N/A

Fertlizer/Pesticide Usage

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Property Information for SCTM# - 81.-2-54.1

Property Information

SCTM# 81.-2-54.1 Site Address Osborn Ave City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address City Zip

Assessment Information

Total Value Land Value Acres Property Class Urban renewl

Special District Information

No Special District Information found

Tax Exemption Information

No Exemption Data available

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
02/01/1985	03/14/1985	9752	00315	$1.00	Town, Of Riverhead

Zoning Information

Code (APZ) Agricultural Protection

Town of Riverhead
Bayberry Park, Bayberry Road, Wading River

SCTM NO. 0600-57-1-15

Property Size	7	Acres
Parking Lot:	Yes	
Size	37667	SF
Material	Asphalt	

Local Water Bodies: yes

Type: un documented freshwater no standing water

Distance to Property Line

124 LF South west

Winter Road Main. NO

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds	6		
Ball Fields	1		
Tennis Courts	2		2009 Capital Improvement to install synthetic surface over deteriorating asphalt
Hanball Courts	1		
Restroom Bldgs	1		

Sanitary System

Type Septic

Sanitary System Maintenance								
2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**

Potable Water Supply

RWD								
HVAC System								
Unit Type								
Fuel Type								

Fertlizer/Pesticide Usage

Location Placed Baseball Field

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection

Stormwater Mangement

Parking Lot,

vegetated swales along north side of parking lot

Pesticide Use

Grubbs only in ballfield areas

Fertilizer Use

Fertilize only Ballfield outfield area
Follow NYSDEC regulations regarding proper Fertlizer Applications
Do not deploy fertlizers within 3 days of forecasted rain.

Potential Pollutants of Conerns at this Facility

Sediment from eroded slopes
Trash

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List

Property Information for SCTM# - 57.-1-15

Property Information

SCTM# 57.-1-15 Site Address Bayberry Rd City Wading River Zip

Owner Information

Owner Name Town of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 36,900 Land Value 36,900 Acres 7.00 Property Class

Special District Information

Code	Special District
SC001	Scavenger waste dist
WD347	Water ext 35

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Data available

Zoning Information

Code (RB80) Residence B-80


CONTACT HELP
MAP HELP
BUFFER TOOL
OBLIQUE AERIAL
WADING RIVER COMMUNITY PARK
BAYBERRY RD
Parcels

Town of Riverhead
Stotzky Park, 55 Columbus Avenue, Riverhead

SCTM NO. 0600-125-1-4.2

Property Size	32.6	Acres
Parking Lot:	Yes	
Size	61478.7	SF
Material	Asphalt	

Local Water Bodies: yes

Type: Wetlands located west and east of park

Distance to Property Line

200 lf

Winter Road Main. Yes

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Play Areas			**Notes**
	Yes	No	
Playgrounds	1		
Ball Fields	6		
Tennis Courts	2		2009 Capital Improvement to install synthetic surface over deteriorating asphalt
Hanball Courts	1		
Office Building	1		
Restroom Bldgs	3		1 adjacent to Field 1, 1 adjacent to multi-purpose fields, Office Bldg

Sanitary System

Type Septic

Sanitary System Maintenance								
2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**

Potable Water Supply

RWD								
HVAC System - Old B&G								
Unit Type	Ceiling Hung							
Fuel Type	275 gal AST - Fuel Oil							
HVAC System - Chapel Bldg								
Unit Type								
Fuel Type	275 gal AST - Fuel Oil							
HVAC System - Recreation Bldg								
Unit Type								
Fuel Type	500 gal AST - Propane							

Fertlizer/Pesticide Usage

Location Placed Baseball Fields

Year Placed:	2010	2011	2012	2013	2014	2015	2016	2017
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	2011	2012	2013	2014	2015	2016	2017
Refuse								
Bottle Recycling								

Best Management Practice Selection

Stormwater Mangement
Parking Lot,

Pesticide Use

Grubbs only in ballfield areas

Fertilizer Use

Fertilize only Ballfield outfield area
Follow NYSDEC regulations regarding proper Fertlizer Applications
Do not deploy fertlizers within 3 days of forecasted rain.

Potential Pollutants of Conerns at this Facility

Sediment from eroded slopes
Trash

Planting

Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List

Property Information for SCTM# - 125.-1-4.2

Property Information

SCTM# 125.-1-4.2 Site Address 1144 Pulaski St City Riverhead Zip

Owner Information

Owner Name Riverhead Water District Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 129,000 Land Value 129,000 Acres 32.60 Property Class Park

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SE301	Rhd full sewer cap
WD301	Riverhead water

Tax Exemption Information

Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (OSC) Open Space Conservation;(Ind C) Industrial C;(BC) Business Center;(SC) Shopping Center

Stozky Park – 55 Columbus Avenue, Riverhead, New York



Town of Riverhead
63 Oakland Drive West, Riverhead

SCTM NO. 0600-65-2-5

Property Size	0.58	Acres
Parking Lot:	N/A	
Size		SF
Material		

Local Water Bodies: DEC ID W-9

Type: Freshwater Ponds

Distance to Property Line
0

Winter Road Main.

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	2	
Ball Fields	0	
Basketball Court	1/2 ct	
Hanball Courts	0	
Restroom Bldgs	0	

Notes

2008 Capital Improvement to install new play unit with poured in place rubber safety surface

Sanitary System

Type N/A

Fertilizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
63 Oakland Drive West, Riverhead
Stormwater Mangement
Parking Lot, N/A

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility
Wild Waterfowl feces
Trash

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl
Consider demonstration rain garden to teach local residents best management concepts

Property Information for SCTM# - 65.-2-5

Property Information

SCTM# 65.-2-5 Site Address Oakland Dr City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value Land Value Acres 0.58 Property Class Playground

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SC001	Scavenger waste dist
WD310	

Tax Exemption Information

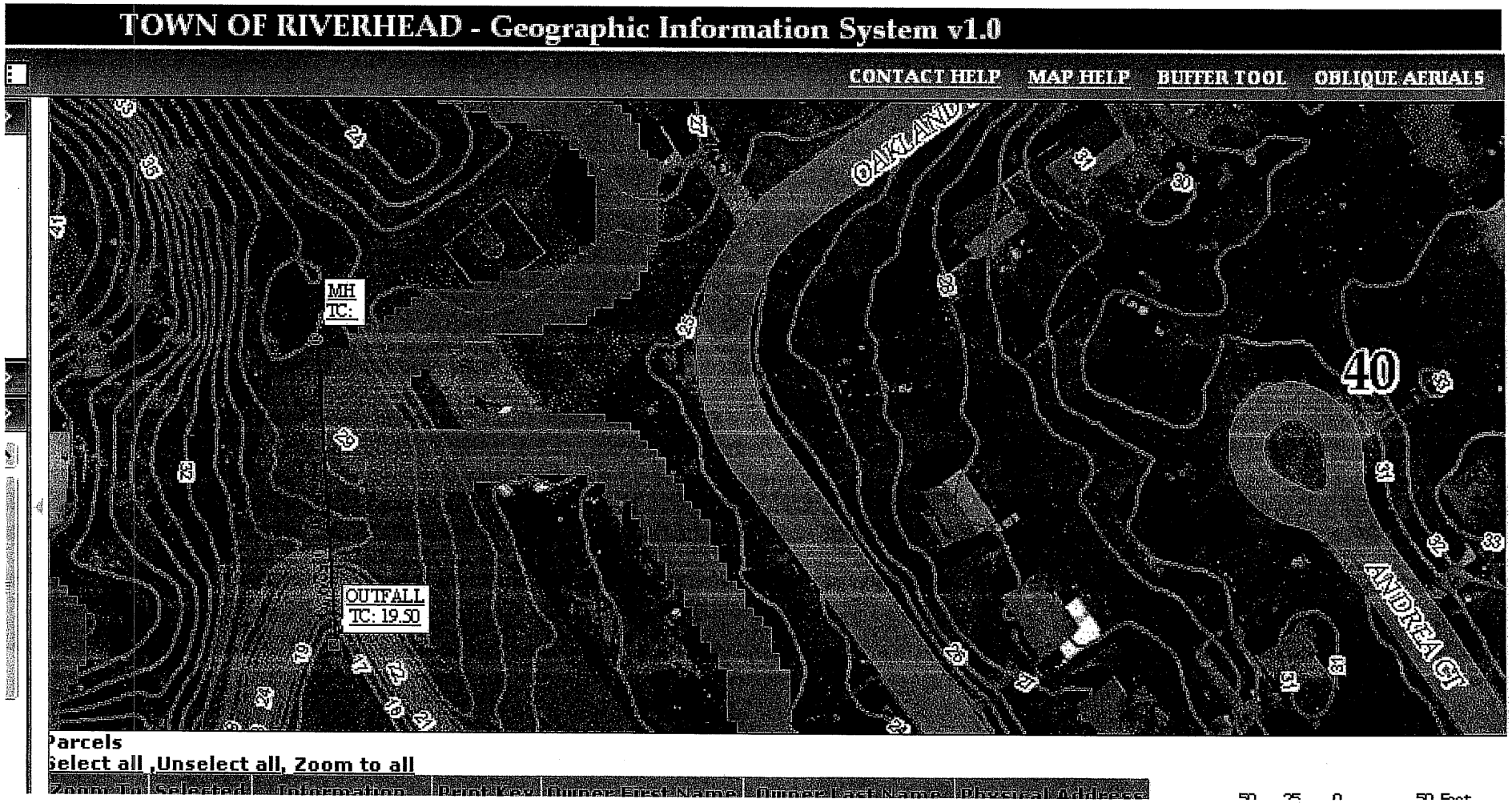
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RA40) Residence A-40



Oakland Drive Park, Riverhead

Town of Riverhead
Two Bears Park, Riverhead

SCTM NO. 0600-84-1-2.68

Property Size	1.2	Acres
Parking Lot:	2- small parking lots	
Size	3,879	SF - total for 2
Material	Asphalt	

Local Water Bodies: N/A

Type:

Distance to Property Line
0

Winter Road Main. No

	2010	2011	2012	2013	2014	2015	2016	2017
Condition	Poor							
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds	1	
Ball Fields	0	
Basketball Court	1/2 ct	
Tennis Courts	2	
Restroom Bldgs	0	

Notes

Asphalt Parking areas and walking paths are deteriorated to uplifting tree roots adjacent to the site

Sanitary System

Type N/A

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Two Bears Park, Riverhead
Stormwater Mangement
Parking Lot,

Remove adjacent trees, remove asphalt and replace with permeable pavers

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility
Wild Waterfowl feces
Trash

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 84.-1-2.68

Property Information

SCTM# 84.-1-2.68 Site Address Old Farm Rd City Riverhead Zip

Owner Information

Owner Name Town of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 1,500 Land Value 1,500 Acres 1.20 Property Class Park

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SC001	Scavenger waste dist
WD301	Riverhead water

Tax Exemption Information

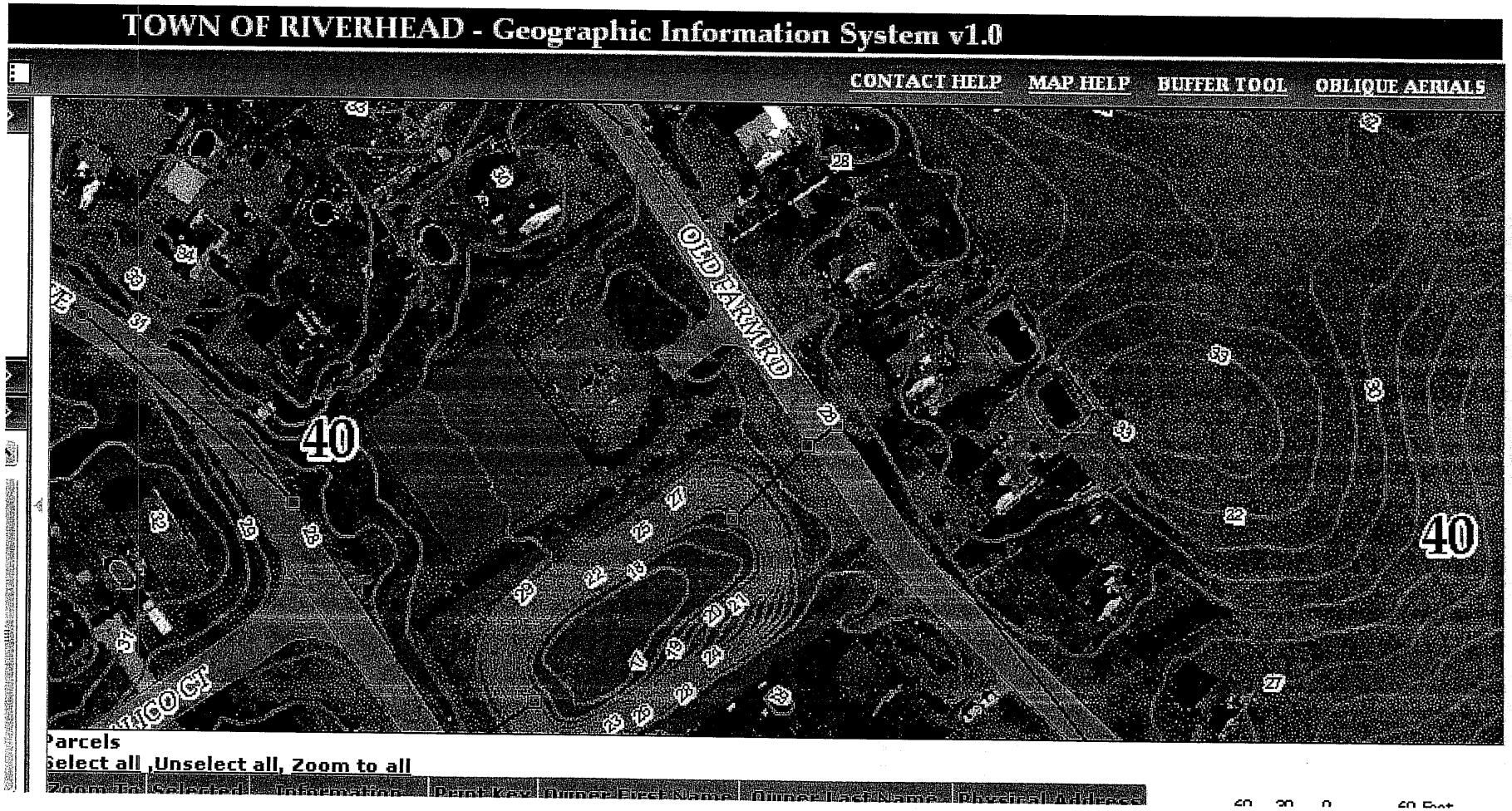
Exemption Code	Description
13500	TWN IN CO

Sales Information

Sale Date	Deed Date	Deed Book	Deed Page	Sale Price	Sale Primary Owner
03/08/2006	03/21/2007	12497	364	$1.00	Town of Riverhead
10/06/2005	10/11/2005	12413	798	$1.00	County of Suffolk

Zoning Information

Code (RA40) Residence A-40



Two Bears Park, Riverhead

Town of Riverhead
Nadel Drive/Joyce Drive Park

SCTM NO. 0600-83-1-33

Property Size	1.4	Acres
Parking Lot:		N/A
Size		Sf
Material		

Local Water Bodies: N/A

Type:

Distance to Property Line
0

Winter Road Main. No

	2010	2011	2012	2013	2014	2015	2016	2017
Condition								
Swept Dates								
Quantity Removed (CY)								

Play Areas		
	Yes	No
Playgrounds		x
Ball Fields	0	x
Basketball Court		x
Tennis Courts		x
Restroom Bldgs	0	

Notes

Grant money available for development of play units

Sanitary System

Type N/A

Fertlizer/Pesticide Usage - N/A

Location Placed

Year Placed:	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Product Used								
Total Product Used								
Quantity as N								
Quantity as P								

Soil Analysis								
Soil Ph (cornell)								

Solid Waste

	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Refuse								
Bottle Recycling								

Best Management Practice Selection
Nadel Drive/Joyce Drive Park
Stormwater Mangement
Parking Lot,
N/A- Pedestrian Park

Pesticide Use N/A

Fertilizer Use N/A

Potential Pollutants of Conerns at this Facility
Wild Waterfowl feces
Trash

Planting
Beginning in 2010 Buildings and Grounds shall utilize species listed on the NYSDEC Native Species Plant List. Design plantings to discourage congregations of wild waterfowl

Property Information for SCTM# - 83.-1-33

Property Information

SCTM# 83.-1-33 Site Address Joyce Dr City Riverhead Zip

Owner Information

Owner Name Town Of Riverhead Additional Owner Info

Street Address 200 Howell Ave City Riverhead Zip 11901

Assessment Information

Total Value 14,400 Land Value 14,400 Acres 1.40 Property Class Playground

Special District Information

Code	Special District
AM001	Rvrhd ambulance dist
FD302	Rvrhd fire zone 1
LT301	Light district
SC001	Scavenger waste dist
WD301	Riverhead water

Tax Exemption Information

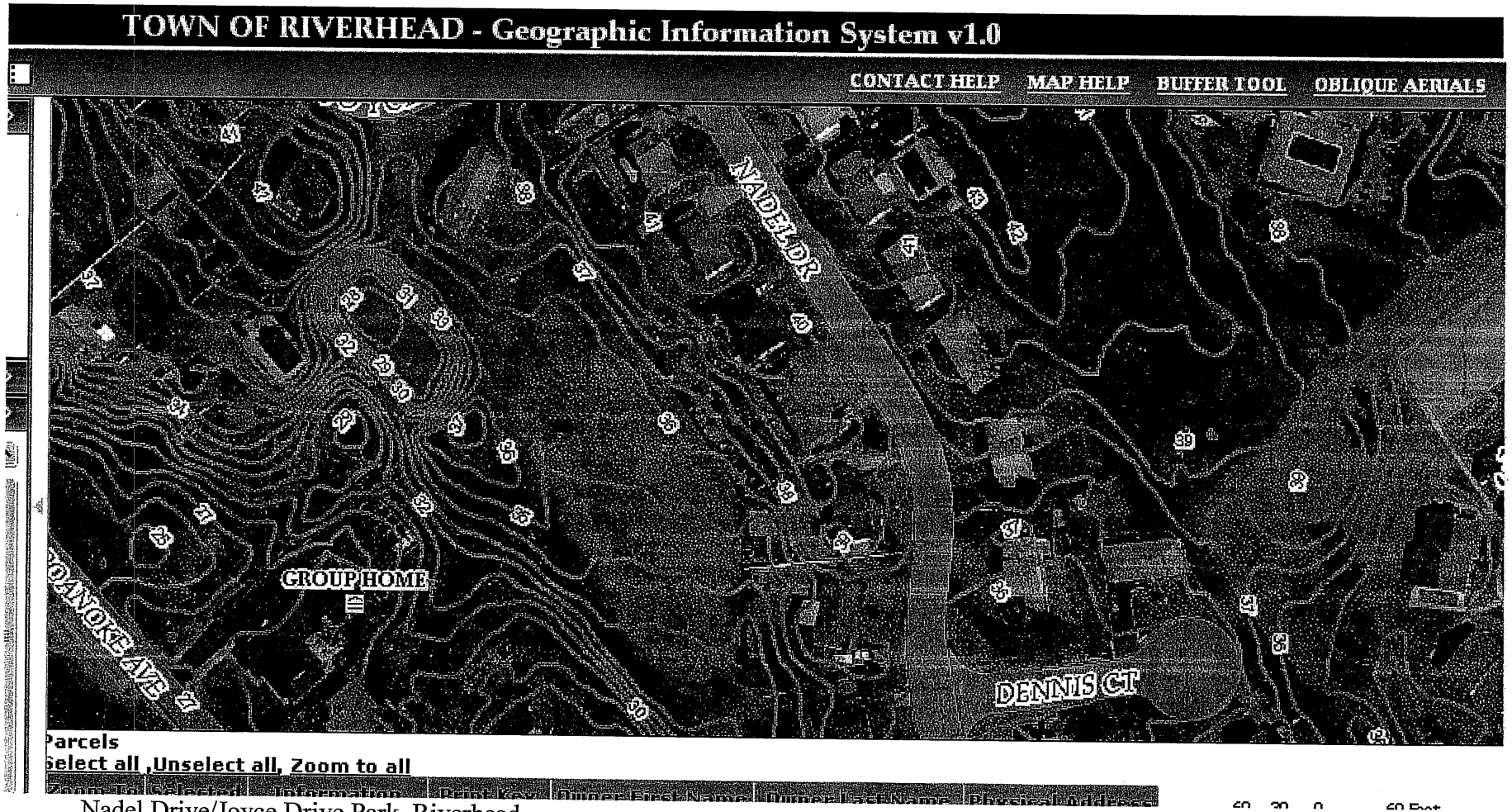
Exemption Code	Description
13500	TWN IN CO

Sales Information

No Sale Data available

Zoning Information

Code (RA40) Residence A-40



Nadel Drive/Joyce Drive Park, Riverhead

APPENDIX E
CONSTRUCTION ACTIVITY CODE ADOPTION AND PROCEDURES FOR SWPPP REVIEWS AND INSPECTIONS

E.1 TOWN CODE AMENDMENTS

On December 18, 2007, the Town of Riverhead adopted local law for the addition of "Chapter 110 – Stormwater Management and Erosion and Sediment Control Regulations" of the Riverhead Town Code. Chapter 110 was modeled after the State policies and procedures for Site Developers to prepare a Storm Water Pollution Prevention Plan (SWPPP) for review by the Town of Riverhead. The local law was then modified in December 2008, to outline fees, and escrow accounts to be set up for the review and inspection of these sites as they become developed.

Purpose of This Document

The purpose of this document is to provide instructions for reviewing a Storm Water Pollution Prevention Plan (SWPPP) for stormwater discharges from construction activities. This outline identifies required components of SWPPPs, provides examples of narratives, forms, schedules and maps required for a SWPPP, and introduces the reference documents utilized in this process.

The flow chart in Figure 1 identifies conditions in which various components of the SWPPP must be prepared. If a site is required to have a full SWPPP, this plan must be expanded to meet all the requirements of the water quality and quantity sizing criteria outlined in the New York State Stormwater Management Design Manual (August 2010) (Design Manual). New York State Standards and Specifications for Erosion and Sediment Control (August 2005) (Blue Book) is the recommended document for the design of erosion and sediment control practices. All the reference documents pertaining to New York State (NYS) technical standards along with other useful guidance documents are provided either on the New York State Department of Environmental Conservation (NYSDEC) web site or listed at the end of this document.

The NYSDEC Central Office (Dave Gasper (518) 402-8114) or Region 1 Office (Sara Dorman (631) 444-0425) may be contacted for questions about the Construction General Permit and the associated Notice Of Intent (NOI) and Notice Of Termination (NOT) forms. The Stormwater Interactive Map (http://www.dec.ny.gov/pubs/42937.html) may be used to look up some basic geographic information such as site coordinates, the locations of TMDL and 303(d) impaired water bodies and whether a municipality is required to maintain an MS4 permit or not.

What is a Construction Permit NOI?

Stormwater discharges from construction activities, that disturb one or more acres of land must obtain a permit. The NOI discussed in this document is the means to obtain coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stomwater Discharges from Construction Activity (Permit No. GP-0-10-001) (General Permit). The NOI is also used for transition between General Permit renewals.

The NOI is a 10 page form which summarizes key information provided in a SWPPP. This information includes contact information for the site operator, contact information for those maintaining the site during both construction and the post-construction period, the Water Quality Volume (WQV) for the site and peak runoff rates for the one, ten and 100 year storms during both the pre- and post-construction periods.

A completed NOI must be submitted with the SWPPP. The General Permit and the NOI are posted on the NYSDEC's web site (http://www.dec.ny.gov/chemical/43133.html).

Who Must File A Notice of Intent Form?

The United States Environmental Protection Agency (USEPA) prohibits point source discharges of stormwater to waters of the United States without a permit issued under the National Pollutant Discharge Elimination System (NPDES). The NYSDEC is delegated by the USEPA to

administer its State Pollutant Discharge Elimination System (SPDES) program in lieu of USEPA's NPDES program. The operator of a stormwater discharge which qualifies for coverage under the General Permit must submit a completed NOI form in order to obtain permit coverage. The General Permit specifies possible restrictions on eligibility of coverage.

What is a SWPPP?

A SWPPP is a plan for controlling runoff and pollutants from a site during and after construction activities. The principle objective of a SWPPP is to comply with the General Permit by planning and implementing the following practices:

- Reduction or elimination of erosion and sediment loading to waterbodies during construction;
- Control of the impact of stormwater runoff on the water quality of the receiving waters;
- Control of the increased volume and peak rate of runoff during and after construction;
- Maintenance of stormwater controls during and after completion of construction.

A well-designed SWPPP requires proper selection, sizing and siting of stormwater management practices to protect water resources from stormwater impacts. Erosion and sediment controls and water quantity and water quality controls are inter-related components of a SWPPP.

What is the Process for Preparing an NOI?

The process starts before the submittal of an NOI with the development of a SWPPP and identification of the required plan elements for the proposed project.

Step 1. Identify plan components:

Use the flow chart in Figure 1 and the accompanying instructions to identify required SWPPP components. All sites are required to prepare an Erosion and Sediment Control Plan (ESCP) component to control the stormwater discharge during construction. The flow chart helps identify if Water Quantity Control or Water Quality Control Plan (WQWQCP) components are required.

Step 2. SWPPP Preparation:

A SWPPP is developed for each individual site by collecting appropriate data and conducting a site visit and evaluation of the specific site. All components of a SWPPP should be prepared and incorporated in the site plan prior to submittal to the local reviewing agency. If the development project is phased, the SWPPP must include the entire site incorporate long-term provisions for the larger plan. The details of each component of the SWPPP must be provided in narratives, tables, schedules, maps, and construction drawings, as appropriate. PLEASE INSERT WHO CAN PREPARE A SWPPP HERE

A SWPPP must be ready for implementation before an NOI is completed. The SWPPP is valid only if development of the lot proceeds in accordance with state, county or local laws and the regulations governing sediment control, land use, flood control, and environmental impact.

Step 3. NOI Preparation:

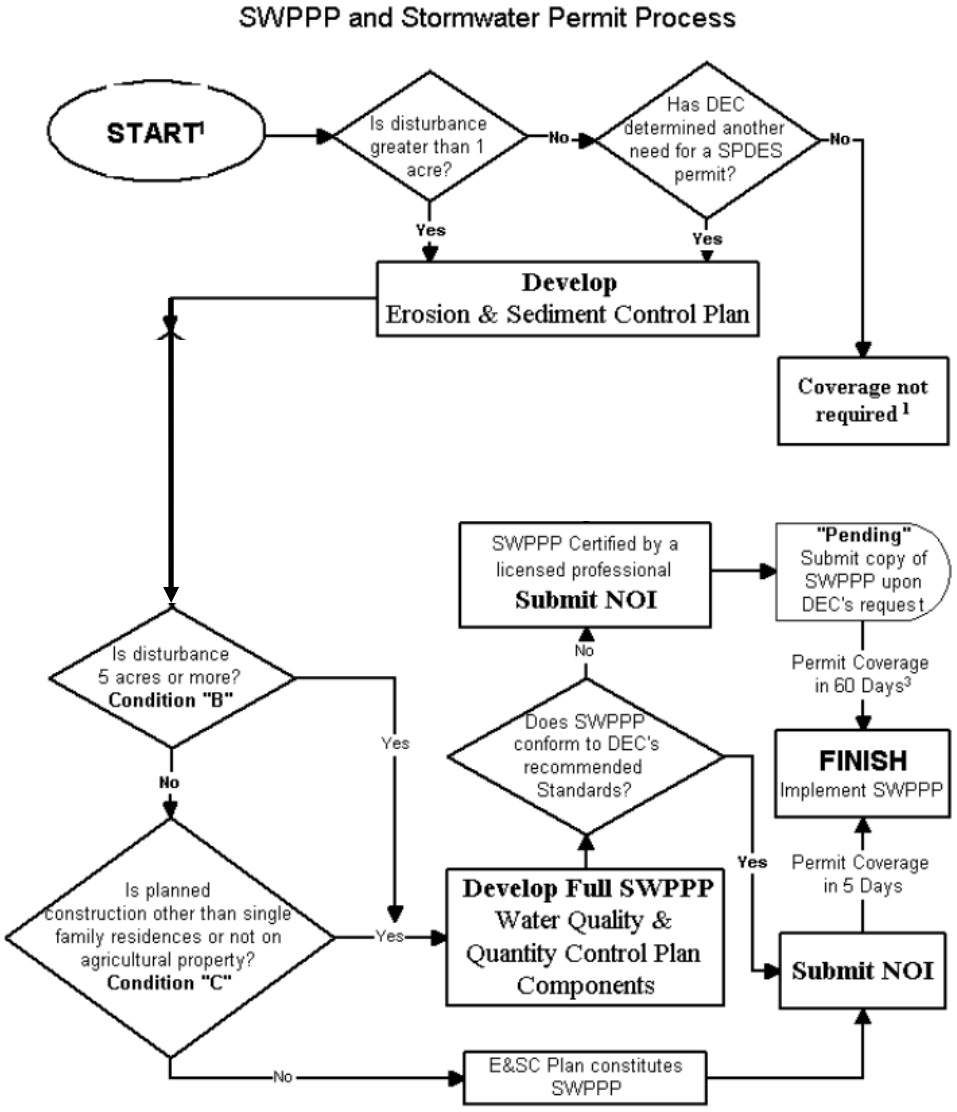
The form is available on-line in an electronic form at http://www.dec.ny.gov/docs/water_pdf/noipgr10.pdf.

Step 4. Implement the SWPPP:

The plan is only effective if implemented and updated as necessary. The site plan and SWPPP must be accessible at all times for inspection. Construction may begin upon receiving a letter of acknowledgmentfrom the NYSDEC issuing a permit identification number.

Step 5. Terminate the coverage:

When the project is completed and the site is stabilized, the coverage must be terminated. To cancel coverage under the General Permit, a NOT form must be completed and submitted to the NYSDEC. MS4s must sign the NOT certifying that it is acceptable for the owner or operator of a construction project to submit the NOT to the NYSDEC. The determination to certify the NOT may be reached by a Town final site inspection or by accepting the Qualified Inspector's final inspection certification(s) required by the General Permit. The principal executive officer, ranking elected official, or duly authorized representative (see Part VI.J. of the General Permit) shall document their determination by signing the “MS4 Acceptance” statement on the NOT. Failure to submit an NOT will result in the billing of annual regulatory fees.



NOTES:

1. Under any of the above conditions other environmental permits may be required. DEC may require permit for construction disturbance < 1 acre on a case by case basis.
2. **and** the following exists: construction and/or stormwater discharges from the construction or post-construction site contain the pollutant of concern identified in the TMDL or 303(d) listing.
3. After receipt by DEC of completed application.

Figure 1- Stormwater Pollution Prevention Plan Component Flow Chart

Identifying required components of SWPPP and Stormwater Permit process

Start:

Is disturbance at least one acre?

No_ If the planned land disturbance is smaller than one acre and NYSDEC has not determined another need for a General permit, coverage will not be required. If another SPDES permit or other environmental permit are required for this site, NYSDEC may require a construction permit as well. For more information on other permits visit the Uniform Procedure Act (UPA)'s web site (http://www.dec.ny.gov/permits/6081.html) or contact the NYSDEC Region 1 Office (Sara Dorman (631) 444-0425).

Yes_ All sites with at least one acre disturbance are required to prepare and implement an Erosion and Sediment Control Plan (ESCP).

Does the site disturb more than five acres of land?

Yes_ Condition B: Prepare a Water Quality and Quantity Control plan (WQWQCP) in addition to an ESCP.

No_ Go to next question

Is the site planned for construction other than single family residential or not on agricultural property?

Yes_ Small construction activity that disturbs between 1 and 5 acres and is planned for land uses indicated in Table 2 of the General Permit such as: town houses, apartment complexes, institutional (places of worship, schools, hospital, government offices, police and fire stations), industrial or commercial development, must prepare WQWQCP components in addition to ESCP.

No_ Any construction activity that disturbs between 1 and 5 acres and is planned for land uses indicated in Table 1 of the General Permit such as: Single-family residential homes or construction on agricultural properties need an Erosion and Sediment Control Plan only. The ESCP is considered a SWPPP for small sites.

Submit NOI: Construction may start 5 business days after the date indicated in the NYSDEC letter acknowledging receipt of the NOI.

Appendix E of the General Permit lists the 303(d) segments impaired by pollutants that are related to construction activity.

Basics of a Stormwater Pollution Prevention Plan

At a minimum, the SWPPP must include the information required in the General Permit. Applicants who decide to deviate from NYS technical standards need to prepare their plans according to the format, scale and calculation details identified in this chapter.
A SWPPP may be organized in the following format:

A. Narrative Report describes the general information about the site and the planned project.

B. Maps are used to illustrate the location of the features and technical details of the site.

C. Plan Components:

Erosion and Sediment Control
Water Quality Control
Water Quantity Control

D. Construction Sequence Schedule is a schedule of ESC and construction activities to be implemented during and after construction.

To conform with NYSDEC's technical standards, practices must be designed according to the specifications documented in the Design Manual for water quality and quantity sizing criteria and performance standards. ESC practices must be designed according to Blue Book standards.

The following is a list of principles that an applicant should consider when developing their SWPPP.
These principles are used in the plan review and evaluation of the SWPPP.

Sound Planning Principles

Planning**:**
• Plan the development to fit the site
• Identify limitations of site in planning process
• Minimize clearing and grading
• Blend perimeter grading with adjoining properties
• Keep soil disturbance to smallest area or a few acres at a time
• Follow the label instructions when using manufactured products

Natural Features:
• Maintain vegetative cover of new constructed practices
• Protect waterbodies, wetlands, wildlife & natural resources
• Protect existing natural features and cultural resources and structures
• Utilize the resources and physical features of the site in the design of stormwater controls
• Avoid disturbance of sensitive areas and valuable resources (vegetative, water, wetlands)

Soil:
• Avoid disturbing steep slopes (Soil Slope Phase of E or F from the USDA Soil Survey for Suffolk County)

• Take extra measures when disturbing highly erodible soil (silt and fine sands).
• Minimize disturbing soils with low depth to bedrock
• Avoid unnecessary compaction
• Avoid infiltration practices on soils with low infiltration rates (less than 0.5”/hr).

Drainage:
• Consider drainage limitations in areas with seasonal high groundwater levels
• Try to maintain the natural drainage systems instead of constructing closed systems
• If construction of closed conveyance systems is necessary, design to convey peak flows for 10-year, 24 hour storms
• Divide the site into natural drainage areas
• Divert the runoff from outside drainage
• Control the impact of the site to downstream areas

Post-Construction Control:
• Implement techniques to prevent point discharge, provide on-site runoff control and replicate pre-construction hydrology for 1yr, 10 yr and 100 yr 24 hour storms:
• Zero runoff leaving site from impervious areas
• Minimize total impervious area
• Consider porous pavement if applicable
• Disconnect rooftops
• Disconnect impervious areas
• Flatten slope
• Increase flow path
• Increase sheet flow
• Increase roughness
• Infiltration swales
• Conserve natural areas
• Vegetative filter strips
• Vegetated open channels

A. The Narrative Report

1. Provide applicant information such as name, legal address and phone number on the cover sheet.
2. Provide address and complete description of the site along with background information about the scope of the project.
3. Provide a statement of stormwater management objectives.
4. Provide a brief description of pre-development conditions:
   a. Identify the natural drainage areas and drainage points.
   b. Name the bodies of waters and wetlands and describe the drainage structures on the site or impacted by the site.
   c. Identify critical and environmentally sensitive areas such as highly erodible areas, steep slopes, natural resource conservation areas, and wildlife habitats.

d. Identify utility lines, easements, water supply wells, and sewage treatment systems

e. Identify soil type:

__ General description (texture, permeability, drainage capacity)

__ Hydrologic Soil Group (HSG) for hydrologic calculations

4. Describe the future site

Provide a brief description of planned post-development conditions, the stormwater runoff quality and quantity comparing to pre-development conditions, and the measures employed to maintain a safe stormwater discharge:

a. The proposed development and the scope of the SWPPP.

b. Disturbed area in acres

c. Duration of activity, from__/__/__ to __/__/__(inclusive of planned winter shutdowns)

d. Acreage, location and boundaries of proposed impervious area

e. Future utility lines, easements, water supply wells, and sewage treatment system

f. Define environmentally sensitive areas that will be protected from disturbance

g. Define the divide lines of drainage areas in the future site according to proposed changes.

h. The SWPPP should include the following pollution prevention measures:

__ Identify the plan for preventing litter, construction chemicals, and construction debris exposed to stormwater from becoming a pollutant source in storm water discharges (e.g., screening outfalls, picked up daily); and

__ Describe how construction and waste materials will be stored on-site and the controls planned to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.

i. If the site discharges to a TMDL or 303d segment, it is the responsibility of the applicants to identify the requirements and accommodate them in the SWPPP.

j. The responsible person(s) for implementation of the SWPPP and inspection. The plan must identify the contractor(s) and subcontractor(s) responsible for each measure and include a signed contractor certification statement.

k. An updated plan must include copies of the written summaries of compliance status that are prepared quarterly. The updated plan and required reports must be signed / certified by the permittee.

B. Maps

Attach individual maps.

1. Provide, at minimum, a 1:24,000 scale map that identifies:

__ location of the site

__ topography

__ offsite drainage area

__ bodies of water in the vicinity of the site

2. Provide a 1”=50’ to 1”=100’ map that shows the **existing** condition of the site including:

__ contour lines

__ drainage area

__ structures

__ natural resources and vegetative cover

__ waterbodies, streams perennial and intermittent

3. Provide individual map(s) based on the requirement of each component of the SWPPP to show all the above features for the **future** condition of the site:
__ final grading, areas of cuts and fills and change of land cover
__ future utility lines, easements, water supply wells, and sewage treatment systems
__ locations of off-site material, waste, borrow or equipment storage areas
__ points of stormwater discharge, flow patterns and discharges to a surface water
1 2
__ all proposed practices: E&SC, water quality controls and water quantity controls
__ boundaries of existing predominant vegetation and proposed limits of clearing

C. Plan Components

The three components of a SWPPP are: Erosion and Sediment Control; Water Quality Control and
Quantity Control. The flow chart in Figure 1 can be used to determine the required components.

EROSION AND SEDIMENT CONTROL

A generic E&SC plan may be utilized for minor grading activities associated with small construction activities. Any sites with an approved standard grading plan also require an E&SC plan designed for the site at the same time as the grading plan development. The following describes basic steps in preparing an E&SC plan. A complete set of design specifications and maintenance requirements of all the E&SC practices may be found in the Department's technical standards for erosion and sedimentation control NY Standards for Erosion and Sediment Control.
Follow construction sequence scheduling. The sequence of actions in an E&SC plan is runoff control, stabilization, and then sediment control. The management practices used in each phase of
the plan must be identified on the Construction Sequence Schedule and appropriate maps.
Erosion and sediment control provisions should be included for all construction activities where any excavation, stripping, filling, grading or earth movement takes place. Provide dimensional details of proposed practices. The details must include plan and vertical view (cross sectional design) calculations used in the sizing and justification for the siting of selected practices.

Step 1: Pre-Construction Actions

Resource Protection
__ Evaluate, mark and protect important trees and associated rooting zones, wetlands, on-site septic systems absorption fields, etc.
__ Protect existing vegetated areas suitable for filter strips, especially in perimeter areas.
Surface Water Protection
__ Identify the drainage area in the plan. Divide the site into natural drainage areas.
__ Divert the off-site clean runoff from entering disturbed areas.
__ Identify bodies of water located either on site or in the vicinity of the site.
__ Plan appropriate practices to protect on-site or downstream surface water.
Stabilize Construction Entrance
__ Establish a temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway.
__ Stabilize bare areas (entrances, construction routes, equipment parking areas) immediately as work takes place. Top these areas with gravel or maintain vegetative cover.
1 3
__ Sediment tracked onto public streets should be removed or cleaned on a daily basis.
Perimeter Sediment Controls

__ Silt fence material and installation comply with the standard drawing and specifications.
__ Install silt fences based on appropriate spacing intervals. Decrease this interval as the slope increases. Silt fence should be placed on or parallel to contours where there is no concentration of water flowing to the silt fence and where erosion occurs in the form of sheet erosion. The area below the silt fence should be undisturbed ground.
__ Install principal basins after construction site is assessed.
__ Install additional sediment traps and barriers as needed during grading.

Step 2: Runoff and Drainage Control

Runoff Control

__ Install practices after sediment traps are installed and before land grading starts.
__ Control the runoff in each small drainage area before flow reaches runoff from entire site.
__ Divert offsite or clean runoff from disturbed areas.
__ Convey surface flows from highly erodible soil and steep slopes to more suitable stable areas.
__ Runoff from existing or proposed cut and fill slopes should be redirected to lower water velocity without causing erosion.
__ Final site drainage should be designed to prevent erosion, concentrated flows to adjacent properties, uncontrolled overflow, and ponding.

Runoff Conveyance System

__ Stabilize conveyance system.
__ Channels and streambanks need to be seeded at the outlet points.
__ Install check dams to slow down the velocity of concentrated flow.
__ Protect existing natural drainage systems and streams by maintaining vegetative buffers and by
implementing other appropriate practices.

Groundwater Recharge

__ Install practices to infiltrate the runoff on the site as much as possible.
__ Provide groundwater recharge to maintain the hydrologic regime of the downstream water bodies and simulate predevelopment hydrology.
__ Use infiltration practices to prevent concentrated flows.

Outlet stabilization

__ Install practices to prevent erosion at discharge points.

Step 3: Grading

__ Limit the initial clearing and earth disturbance to that necessary to install sediment control measures. Excavation for footings, clearing, or other earth disturbance may only take place after the sediment and erosion controls are installed.
__ Stockpile the topsoil removed from the site. The topsoil should be protected, stabilized and sited in a location away from the storm drains and waterbodies.
__ Changes in grade or removal of vegetation should not disturb established buffers and should not be allowed within any regulated distance from wetlands, the high water line of a body of water affected by tidal action, or other such protected zones.

__ Avoid disturbance of steep slopes.
__ An undisturbed buffer should be maintained to control runoff from steep slopes within sensitive areas.
__ Proposed grading should not impair existing surface drainage resulting in a potential erosion hazard impacting adjacent land or waterbodies.

Step 4: Erosion Control (Stabilization)
__ Implement erosion control practices to keep the soil in place.
__ Stabilization should be completed immediately for the surface of all perimeter controls and perimeter slopes.
__ When activities temporarily cease during construction, soil stockpiles and exposed soil should be stabilized by seed, mulch or other appropriate measures as soon as possible, but in no case more than 14 days after construction activity has ceased.
__ Following initial soil disturbance or re-disturbance, permanent or temporary, stabilization should be completed within 14 days or as soon as possible.
__ Apply temporary or permanent stabilization measures immediately on all disturbed areas where work is delayed or completed.
__ Consult the local Soil and Water Conservation District for proper timing and application rate of seed, fertilizer and mulch.
Step 5: Sediment Control
__ At any location where surface runoff from disturbed or graded areas may flow off the construction area, sediment control measures must be installed to prevent sediment from being transported off site. No grading, filling or other disturbance is allowed within existing drainage swales.
__ Swales or other areas that transport concentrated flow should be appropriately stabilized.
__ Downspout or sump pump discharges must have acceptable outfalls that are protected by splash blocks, sod, or piping as required by site conditions (i.e., no concentrated flow directed over fill slopes).
Step 6: Maintenance and Inspection
__ Identify the type, number and frequency of maintenance actions required for stormwater management and erosion control during construction and for permanent practices that remain on the site once construction is finalized.
__ Inspection must be indicated on the Construction Sequence Schedule. Inspection must be performed every 7 calendar days and immediately after periods of rainfalls greater than 0.5 inch.
__ Inspection, must verify that all practices are adequately operational, maintained properly and that sediment is removed from all control structures.
__ Inspection, must look for evidence of the soil erosion on the site, potential of pollutants entering drainage systems, problems at discharge points (such as turbidity in receiving water), and signs of soil and mud transport from the site to the public road at the entrance.
1 5
__ Routine maintenance must be identified on the schedule and performed on a regular basis and as soon as a problem is identified.
__ Identify the person or entities responsible for conducting the maintenance actions during construction and post-construction.
__ Retain a copy of the inspection and quarterly reports on-site with the SWPPP.
Step 7: Finalize Grading & Landscaping
__ Identify the final grading and stabilization plan once the construction is completed.
__ All open areas, including borrow and spoil areas must be stabilized.
__ Plan a permanent top soil, seed, sod, mulch, riprap or other stabilization practices in the remaining
disturbed areas as appropriate.

__ Stabilization must be undertaken no later than 14 days after construction activity has ceased except as noted in the GP-02-01.
__ Remove the temporary control measures.

Step 8: Post Construction Controls:

__ Identify the permanent structural or non-structural practices that will remain on the site.
__ Ensure that the permanent structural or non-structural practices utilized during construction are
properly designed to suit the post-construction site conditions.
__ In finalizing the plan, evaluate the post-construction runoff condition on the site.
__ Minimize the risk of concentrated flow and erosion.
__ On-site runoff controls help reduce the risk of increased runoff velocity, erosion and point source
discharge. In addition to the standard runoff and erosion control practices identified in NY Standards for Erosion and Sediment Control, some of the techniques discussed under on-site runoff control discussion may be applied.

Note:

If you are required to prepare only an Erosion and Sediment Control plan component, fill out the Construction Sequence Schedule. This will finalize your SWPPP.

If you are required to prepare a Water Quality and Quantity Control plan component, proceed to **Water Quality and Water Quantity Control Plan** discussion.

On-site Runoff Control

To minimize concentrated flow from a small site a few runoff control techniques may be implemented. These provisions help prevent point discharge and provide on-site runoff control by
infiltration. The goal is to minimize runoff and replicate pre-construction hydrology. The implemented techniques allow runoff from impervious areas to be infiltrated into the soil or filtered
by overland flow or other mechanisms. A sensible site design is possible by taking advantage of infiltration capacity of the pervious area of the site. Depending on site-specific situations, on-site management of stormwater runoff can be accomplished by a combination of the following approaches. For guidance on specific designs of these practices, consult the following web site: www.stormwatercenter.net15. Under “Manual Builder”, guidance is provided under “stormwater credits”

Conserve Natural Areas:

• Minimize total impervious area
• Conserve forest retention areas, wetlands and buffers
• Conserve lands in/on flood plains, steep slopes and open space

Disconnect Impervious Areas

• Disconnect rooftops drainage
• Disconnect other impervious areas
• Install grid pavers

Sheet Flow to Buffers

• Increase roughness
• Vegetative filter strips
• Flatten slope

• Increase flow path
• Increase sheet flow with level spreader

Use Open Channels

• Vegetated open channels
• Infiltration swales
• Install check dams

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Water Quantity and Water Quantity Control Plan

A Water Quality and Water Quantity Control Plan must be designed to meet NYSDEC's required sizing criteria and pollutant removal goals. These criteria are fully presented in the Chapter 4 and Chapter 5 of NYS Stormwater Management Design Manual. The following provides a list of information and calculations required for completing the water quality and quantity components of the SWPPP. The outline of the following plan may also be used by those who choose to deviate from NYSDEC's standards.

Water Quality and Quantity Plan Details

Select stormwater management practices from the list of approved practices in the Chapter 5 of the Design manual that suit the future condition of the site. Identify a list of selected practices along with a brief description and siting information. Location of these practices must also be identified on a map. The SWPPP must provide dimensional details of proposed practices and include summary tables of corresponding calculations for the design of the selected practices. Use Appendix H of the Design Manual for an example checklist for final stormwater management plan preparation.

Mapping requirements:

__ Ensure that in addition to the general features identified previously, maps prepared for the site illustrate at a minimum:

o Existing and proposed topography (minimum of 2-foot contours recommended)
o Mapping of predominant soils from USDA soil surveys as well as location of any sitespecific borehole investigations that may have been performed.
o Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains and flow paths
o Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainages
o Location and dimensions of proposed channel modifications, such as bridge or culvert crossings
o Location, size, maintenance access, and limits of disturbance of proposed structural stormwater management practices

__ Prepare representative cross-section and profile drawings and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, etc.). Drawings should include:

o Existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.)
o Design water surface elevations
o Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc.

o Logs of borehole investigations that may have been performed along with supporting geotechnical report.

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Hydrologic and hydraulic analysis:

Conduct a hydrologic and hydraulic analysis for all structural components of the stormwater system (e.g., storm drains, open channels, swales, management practices, etc.) for applicable design storms. The analysis should include:

__ Existing condition analysis for time of concentrations, runoff rates, volumes, velocities, and water surface elevations showing methodologies used and supporting calculations

__ Proposed condition analysis for time of concentrations, runoff rates, volumes, velocities, water surface elevations, and routing showing the methodologies used and supporting calculations

__ Final sizing calculations for structural stormwater management practices including contributing drainage area, storage, and outlet configuration:

o Sizing for Water Quality (WQv) Control: Size the selected practices based on the 90% rule methodology defined in the Chapter 4 of the Design Manual. Identify the numeric values and provide calculations for:

WQv = [(P)(Rv)(A)] /12

Rv = 0.05+0.009(I)

I = Impervious Cover (Percent)

Minimum Rv = 0.2

P = 90% Rainfall Event Number (See Figure 4.1)

A = site area in acres

o Sizing for Water Quantity Controls:

__Channel Protection (Cpv), Default Criterion: Cpv = 24-hour extended detention of post-developed, 1-year, 24-hour storm event.

__Channel Protection, Option for Sites Larger than 50 Acres: Distributed Runoff Control - geomorphic assessment to determine the bankfull channel characteristics and thresholds for channel stability and bedload movement.

o Sizing for Overbank Flood (Qp): Control the peak discharge from the 10-year storm to 10-year pre-development rates.

o Sizing for Extreme Storm (Qf): Control the peak discharge from the 100-year storm to 100-year pre-development rates. Safely pass the 100-year storm event.

Note: The requirements for channel protection, overbank flood, and extreme storm controls may not be necessary when stormwater discharges to large streams or lakes. Generally, stormwater discharges to stream of the fourth order or larger will not require the stormwater quantity controls on with direct discharge to streams of fourth order or larger. For guidance on identification of stream order refer to the Design Manual or visit Stormwater Construction Toolbox, More Tools for additional information.

__ Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities (e.g., stormwater ponds and wetlands)

__ Final analysis of potential downstream impact/effects of project, where necessary

__ Dam breach analysis, where necessary

Finalize landscaping:

__ Final landscaping plans for structural stormwater management practices and any site

reforestation or revegetation
__ Provide structural calculations and construction specification, where necessary

Maintenance plan:

Maintenance plan must include:
__ Name, address, and phone number of responsible parties for maintenance.
__ Description of annual maintenance tasks
__ Description of applicable easements
__ Description of funding source
__ Minimum vegetative cover requirements
__ Access and safety issues
__ Testing and disposal of sediments that will likely be necessary
__ Evidence of acquisition of all applicable local and non-local permits
__ Evidence of acquisition of all necessary legal agreements (e.g., easements, covenants, land trusts)

D. Schedule 1- Construction Sequence Scheduling

Prepare a schedule for activities during and after construction. Define the sequence of implementing the E&SC and water quality / quantity control practices identified in your SWPPP. This schedule must identify activities during the period prior to soil disturbance through site stabilization. Also identify the inspection and maintenance measures during and after construction. Quantity of practices may be identified by the number of units or any other type of measures identified in the SWPPP. All the planned activities should be marked on corresponding maps. A copy of the schedule along with the maps should be available at the construction site.

Type	**Activities (Identify name of planned practices)**	Number			

Companion Documents:
__New York State Stormwater Management Design Manual
__New York Standards and Specifications for Erosion and Sediment Control
__Reducing the Impacts of Stormwater

Runoff from New Development

5.2 EVALUATING AND MEASURING PROGRESS

The Town will keep an inventory of all reviewed SWPPPS, how many requested revisions each one had and when it was approved. The amount of contractor training seminars will be quantified. In 2008, the Town passed legislation that allowed for the collection of fees to pay both Town staff as well as outside consultants to review SWPPPS and conduct site inspections.

6.6 ANNUAL REPORTING

The annual reporting period ends March 9 of each year. The annual report must be sent to the DEC by June 1 of each reporting year. For MCM 4, the Town will supply the DEC with the following information:

- If the Town has adopted a law that provides equal protection to the NYS SPDES General Permit
- Does that Town have a SWPPP review procedure in place
- How many SWPPPS have been reviewed in the reporting period
- Does the Town have a mechanism for receipt and consideration of public comments related to construction SWPPPs
- Does the Town provide education and training for contractors about the local SWPPP process
- Identify the types of enforcement actions used during the reporting period for construction activities.
- How many projects have been authorized for disturbances of one acre or more.
- How many construction projects disturbing at least one acre were active in your jurisdiction during this reporting period
- What percent of active construction sites were inspected during this reporting period
- What percent of active construction sites were inspected more than once.

Do all inspectors working for the Town use the NYS Construction Stormwater Inspection Manual

APPENDIX F

ILLICIT DISCHARGE DETECTION AND ELIMINATION CODE ADOPTION PROCEDURES TRACKING OUTFALL RECONNAISSANCE

CHAPTER 109 STORM SEWERS

[HISTORY: Adopted by the Town Board of the Town of Riverhead as indicated in article histories. Amendments noted where applicable.
Editor's Note: Former Ch. 109, Moratorium on Residential Development, adopted 11-5-2003 by L.L. No. 22-2003, as amended, was repealed 10-2-2007 by L.L. No. 30-2007.
]

GENERAL REFERENCES

Agricultural lands preservation — See Ch. 44.

Bays and creeks — See Ch. 47.

Docks and wharves — See Ch. 56.

Flood damage prevention — See Ch. 65.

Waterways — See Ch. 106.

Tidal and freshwater wetlands — See Ch. 107.

Stormwater management and erosion and sediment control — See Ch. 110.

ARTICLE I Illicit Discharges and Connections (§ 109-1 — § 109-24)

[Adopted 12-18-2007 by L.L. No. 45-2007]

§ 109-1 Legislative intent.

The purpose of this article is to provide for the health, safety and general welfare of the residents of the Town of Riverhead through the regulation of connections to the Town's municipal separate storm sewer system (MS4) and the regulation of nonstormwater discharges to the MS4 to the maximum extent practicable as required by federal and state law. This article establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the New York State Department of Environmental Conservation's (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit (GP-02-02) for Municipal Separate Storm Sewer Systems. The objectives of this article are:

A.
To meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;

B.
To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;

C.
To prohibit unauthorized and illicit connections, activities and discharges to the MS4;

D.
To establish legal authority to implement all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and

E.
To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

§ 109-2 Definitions.

Whenever used in this article, unless a different meaning is stated in a definition applicable to only a portion of this article, the following terms will have meanings set forth below:

BEST MANAGEMENT PRACTICES (BMPs)
Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CLEAN WATER ACT
The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

CODE
Code of the Town of Riverhead, New York.

CONNECTION PERMIT
An authorization for connection as well as a discharge permitted under § 109-13 of this article, as well as a discharge authorized under a SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the NYSDEC. This permit is subject to special terms and conditions by the SMO. The permit will expire on or before the expiration of the NYSDEC SPDES permit, waiver or order or upon change of ownership or use of the property.

CONSTRUCTION ACTIVITY
Activities requiring authorization under a NYSDEC SPDES Permit for Stormwater Discharges From Construction Activity, GP-02-01, as amended or revised, or activities covered by Erosion and Sediment Control or Pollution Prevention Plan laws, ordinances or regulations of the Town. These activities include construction projects resulting in land disturbance equal to or greater than the area stipulated in statutes or regulations of the state, county or the Town, whichever is most restrictive. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition.

COUNTY
The County of Suffolk.

GENERAL PERMIT
An authorization for the connection as well as the discharge of stormwater or authorized nonstormwater (per § 109-6A of this article), from properties occupied by private dwellings.

HAZARDOUS MATERIALS
Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLICIT ACTIVITY
Any action or condition, active or passive, that results in nonstormwater discharges entering the Town's MS4.

ILLICIT CONNECTION
Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4 including, but not limited to:

A.
Any conveyances which allow any nonstormwater discharge including treated or untreated sewage, process wastewater and wash water to enter the MS4, and any connections to the

storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by an authorized enforcement agency; or

B.
Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps or equivalent records and approved by an authorized enforcement agency;

C.
Any building or structure floor drain or trench drain; and

D.
Any unauthorized connection as defined elsewhere in this section.

ILLICIT DISCHARGE
Any discharge through an unauthorized connection, and any direct or indirect nonstormwater discharge to the MS4, except as exempted in § 109-6 of this article.

INDIVIDUAL SEWAGE TREATMENT SYSTEM
A facility serving one or more parcels of land or residential households, or a private, commercial or institutional facility that treats sewage or other liquid wastes for discharge into the groundwaters of New York State, except where a permit for such a facility is required under the applicable provisions of Article 17 of the Environmental Conservation Law.

INDUSTRIAL ACTIVITY
Activities requiring the SPDES Permit for Discharges From Industrial Activities Except Construction, GP-98-03, as amended or revised.

LICENSED/CERTIFIED PROFESSIONAL
New York State licensed professional engineer or licensed architect.

MS4
Municipal separate storm sewer system owned by the Town or another municipal entity.

MUNICIPAL SEPARATE STORM SEWER SYSTEM
A conveyance or system of conveyances and retention and infiltration facilities; (including roads with drainage systems, curbs and gutters on municipal streets, manholes, catch basins, ditches, man-made channels, or storm drains, stormwater basins, drainage reserve areas, drywells or any other component of a stormwater system) that is:

A.
Owned or operated by the Town or another municipal entity;

B.
Designed or used for collecting and/or conveying and/or storing and/or infiltrating and/or managing stormwater; and

C.
Which is not a combined sewer; and

D.
Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

MUNICIPALITY
A county, Town, village or other unit of government.

NONSTORMWATER DISCHARGE
Any discharge to the MS4 that is not composed entirely of stormwater.

NYSDEC
The New York State Department of Environmental Conservation

OFFICE OF THE TOWN ENGINEER
Office of the Town Engineer of the Town of Riverhead.

PERSON
Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT
Anything which causes or contributes to pollution. Pollutants may include, but are not limited to, dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, hazardous materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards. Also, paints, varnishes, and solvents; oil and other automotive fluids; hazardous or nonhazardous liquid and solid wastes, yard wastes including branches, grass clippings and leaves; refuse, rubbish, garbage, litter, or other discarded or abandoned objects and accumulations so that same may cause or contribute to pollution; and discharges of soaps, detergents, or floatables; pesticides, herbicides, and fertilizers; sewage, fecal coliforms and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building, structure or site improvements; cement, gravel, sand, silt, mud, other soils, and noxious or offensive matter of any kind.

PREMISES
Any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.

SPECIAL CONDITIONS

A.
Discharge compliance with water quality standards: The condition that applies where an MS4 has been notified that the discharge of stormwater authorized under their MS4 SPDES permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition, the MS4 must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.

B.
Federal Clean Water Act Section 303(d) listed waters: the condition in an MS4 SPDES permit that applies where the MS4 discharges to a NYSDEC 303(d) listed water. Under this condition, the MS4's stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.

C.
Total maximum daily load (TMDL) strategy: the condition in an MS4 SPDES permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a water body or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the MS4 was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

D.
The condition in an MS4 permit that applies if a TMDL is approved in the future by EPA for any water body or watershed into which an MS4 discharges: under this condition, the MS4 must review the applicable TMDL to see if it includes requirements for control of stormwater discharges.

If an MS4 is not meeting the TMDL stormwater allocations, the MS4 must, within six months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

SPECIAL PERMIT
An authorization for the connection as well as the discharge of stormwater or authorized nonstormwater (per § 109-6 of this article), from all properties occupied by other than private dwellings.

STATE
The State of New York.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER DISCHARGE PERMIT
A permit issued by the NYSDEC that authorizes the discharge of pollutants to waters of the state.

STORMWATER
Rainwater; or surface runoff and/or subsurface drainage due to rain, snow, or other precipitation or a combination thereof.

STORMWATER MANAGEMENT OFFICER (SMO)
The Town Engineer of the Town of Riverhead (or the person serving in the capacity of the Town Engineer) or his/her authorized deputies, agents or representatives, including employees of other Town Departments, as appropriate.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
SWPPPs formalize the design of stormwater management measures for each site. The SWPPP has two parts: an erosion and sediment control plan and a post-construction stormwater control plan. The erosion and sediment control plan, required for all regulated construction activities, lays out the nature, placement and capacity of runoff control measures to be used during construction. Where permanent measures are necessary to manage stormwater runoff after construction is completed, a post-construction stormwater control plan is also required, setting forth engineering details, construction schedules and responsibility for ongoing operation and maintenance of permanent stormwater management measures.

303(d) LIST
A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the NYSDEC as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards and are not expected to improve within the next two years.

TMDL
Total maximum daily load.

TOTAL MAXIMUM DAILY LOAD
The maximum amount of a pollutant allowed to be released into a water body so as not to impair uses of the water, allocated among the sources of that pollutant.

TOWN
The Town of Riverhead.

TOWN ENGINEER
The Town Engineer of the Town of Riverhead, or his/her authorized deputies, agents, or representatives.

UNAUTHORIZED CONNECTION
A permanent or temporary unapproved direct or indirect conveyance to the Town's MS4. Any connection, pipe, hose, swale, or other conveyance underground or above ground that is not documented on plans, maps, or equivalent records approved by the Town Engineer or other

jurisdictionally appropriate agency, or that is not approved by a permit issued by the Town Engineer or other jurisdictionally appropriate agency, is considered unauthorized regardless of whether the discharge is otherwise allowed by this article.

UNCONTAMINATED
"Free of pollutants" or containing pollutants within acceptable limits as defined by the governing regulatory code. (See definition of Pollutant).

WASTEWATER
Water that is not stormwater, and that is adversely affected in quality by anthropogenic influence. This includes, but is not limited to discharges resulting from residential, commercial, industrial, and agricultural water usage.

§ 109-3 Applicability.

This article shall apply to discharged connections to the Town's MS4. This includes activities that result in discharge, seepage or deposition into the Town's MS4, and all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency and allowed by a discharge or connection permit or other document approved by the jurisdictionally appropriate agency. This article shall also apply to discharges and connections entering via another MS4 that is tributary to the Town's MS4.

§ 109-4 Responsibility for administration.

The Town Engineer of the Town of Riverhead, or duly authorized deputies, agents or representatives, is designated as the Stormwater Management Officer (SMO). The Town Engineer, duly authorized deputies, agents or representatives or employees of other Riverhead Town departments, as appropriate, shall administer, implement, and enforce the provisions of this article.

§ 109-5 Severability.

The provisions of this article are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this article or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this article.

§ 109-6 Discharge prohibitions; exceptions.

A.
Prohibition of illicit discharges. No person shall discharge or cause to be discharged into the Town's MS4 any materials other than stormwater except as provided in Subsection A(1). The commencement, conduct or continuance of any illicit (illegal) discharge to the MS4 is prohibited except as described as follows:

(1)
The following discharges are exempt from discharge prohibitions established by this article, unless they are subsequently determined to be substantial contributors of pollutants: water line flushing or other potable water sources, uncontaminated landscape irrigation or lawn watering, existing diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains, uncontaminated crawl space or basement sump pump discharges, air conditioning condensate, uncontaminated irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire-fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

(2)
Discharges approved in writing by the SMO to protect life or property from imminent harm or damage, provided that such approval shall not be construed to constitute compliance with other applicable laws, codes and requirements, and further provided that such discharges may be permitted for a specified time period and under

such conditions as the SMO may deem appropriate to protect such life and property while reasonably maintaining the purpose and intent of this article.

(3)
Dye testing in compliance with applicable state and local laws or codes is an allowable discharge, but requires a written notification to the SMO prior to the time of the test.

(4)
The prohibition shall not apply to any discharge permitted under a SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the NYSDEC, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws, codes and regulations, and provided that written approval has been granted for any discharge to the MS4 by the SMO.

§ 109-7 Unauthorized connections prohibited.

A.
Connections to the Town's MS4 without a permit are prohibited.

(1)
Any connection to the Town's MS4 is considered to be an unauthorized connection unless it has been approved by a permit issued by the SMO or documented on a plan, or map that has been approved by the SMO. This constraint applies to all connections, permanent or temporary, regardless of whether the discharge is otherwise permitted by this article.

(2)
The construction, use, maintenance or continued existence of unauthorized connections to the Town's MS4 is prohibited.

(3)
This prohibition expressly includes, without limitation, connections made in the past, regardless of whether the connection was permissible under law, code or practices applicable or prevailing at the time of connection.

(4)
A person is considered to be in violation if a connection is made from his/her property to the Town's MS4 that is not authorized, or allows such a connection to continue.

(5)
The connection of interior floor, trench, or roof drains to the MS4 at the entrances to buildings or other structures is prohibited.

B.
Remedy unauthorized connections. Where the SMO has identified an unauthorized connection as defined in Subsection A(2) of this section, the SMO may require that a proper permit be obtained or that the connection be removed at the property owner's expense.

§ 109-8 Failing individual sewage treatment systems prohibited.

No persons shall operate a failing individual sewage treatment system in areas tributary to the Town's MS4. A failing individual sewage treatment system is one which has one or more of the following conditions:

A.
The backup of sewage into a structure.

B.
Discharges of treated or untreated sewage onto the ground surface.

C.
A connection or connections to the Town's MS4.

D.
Liquid level in the septic tank above the outlet invert.

E.
Structural failure of any components of the individual sewage treatment system that could lead to any of the other failure conditions as noted in this section.

F.
Contamination of off-site groundwater.

§ 109-9 Activities contaminating stormwater or maintaining or using an unauthorized connection to MS4 prohibited.

A.
Activities that are subject to the requirements of this article are those types of activities that:

(1)
Cause or contribute to a violation of the Town's MS4 SPDES permit.

(2)
Cause or contribute to the Town being subject to the special conditions as defined in § 109-2 of this article.

(3)
Cause or contribute to the Town's MS4 receiving pollutants as defined in § 109-2 of this article.

(4)
Cause or contribute to the Town's MS4 receiving discharges from an undocumented or unauthorized connection (whether permanent or temporary).

B.
Such activities include failing individual sewage treatment systems as defined in § 109-8 of this article, improper management of pet waste or any other activity that causes or contributes to violations of the Town's MS4 SPDES permit authorization.

C.
Upon notification to a person that he or she is engaging or has engaged in activities that cause or contribute to violations of the Town's MS4 SPDES permit authorization or cause or contribute to pollutants being discharged to the Town's MS4, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the Town's MS4 SPDES permit authorization, or causes or contributes to pollutants to be discharged or deposited into the Town's M54.

§ 109-10 Prevention, Control and Reduction of Stormwater Pollutants.

A.
Best management practices. Where the SMO has identified illicit discharges as defined in § 109-2 of this article or activities contaminating stormwater as defined in § 109-9 of this article, the SMO may require implementation of best management practices (BMPs) to control those illicit discharges and activities.

(1)
The owner or operator of a commercial or industrial establishment shall provide, at his or her own expense, reasonable protection from accidental discharge of prohibited materials, pollutants or other wastes into the MS4 through the use of structural and nonstructural BMPs.

(2)
Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge as defined in § 109-2 of this article or an activity contaminating stormwater as defined in § 109-9 of this article, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to reduce or

eliminate the source of pollutant(s) to the MS4.

(3)
Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section.

B.
Individual sewage treatment systems: response to special conditions requiring no increase of pollutants or requiring a reduction of pollutants. Where individual sewage treatment systems are contributing to the Town's MS4 being subject to the special conditions as defined in § 109-2 of this article, the owner or operator of such individual sewage treatment systems shall be required to:

(1)
Maintain and operate individual sewage treatment systems as follows:

(a)
Have the septic tank professionally inspected annually to determine scum and sludge accumulation. A copy of the inspection report(s) shall be submitted to the SMO for review and determination of appropriate maintenance or remediation actions to be performed. These actions include, at a minimum:

(b)
Septic tanks must be pumped out whenever the bottom of the scum layer is within three inches of the bottom of the outlet baffle or sanitary tee or the top of the sludge is within 10 inches of the bottom of the outlet baffle or sanitary tee.

(c)
Avoid the use of septic tank additives.

(d)
Avoid the disposal of excessive quantities of detergents, kitchen wastes, laundry wastes and household chemicals into the septic system; and

(e)
Avoid the disposal of cigarette butts, disposable diapers, sanitary napkins, trash and other such items into the septic system.

(2)
Repair or replace individual sewage treatment systems as follows:

(a)
In accordance with 10 NYCRR, Appendix 75-A to the maximum extent practicable.

(b)
A design professional licensed and qualified to practice in New York State shall prepare design plans for any type of absorption field that involves:

[1]
Relocating or extending an absorption area to a location not previously approved for such.

[2]
Installation of a new subsurface treatment system at the same location.

[3]
Use of alternate system or innovative system design or technology.

(c)
A written certificate of compliance shall be submitted by the design professional to the SMO at the completion of

construction of the repair or replacement system.

§ 109-11 Suspension of access to MS4.

A.
The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge, which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize hazardous conditions which may adversely affect the health, safety, welfare, and property of residents of the Town.

B.
Suspension due to the detection of illicit discharge or unauthorized connection. Any person discharging to the Town's MS4 in violation of this article may have his or her MS4 access terminated if such termination would abate or reduce an illicit discharge or result in the remedy of an unauthorized connection. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence, or that the discharger has obtained proper permission for the connection. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur or the unauthorized connection has not been sufficiently remedied. A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this section without the prior approval of the SMO.

§ 109-12 Industrial or construction activity discharges.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the SMO prior to the allowing of discharges to the MS4.

§ 109-13 Connection permits.

A.
General. Any connection to the Town's MS4 requires a permit issued by the SMO. Applications for permits shall be made on forms provided by the SMO. Permit applications shall be supplemented by any plans, specifications, analyses, calculations or other information considered pertinent by the SMO. The Town considers connection to its MS4 as a last resort to solve flooding problems. Before approving a connection, the Town will require that applicants use on-site best management practices to detain and remediate stormwater and other authorized nonstormwater discharges to the maximum extent practicable. The SMO will assess the adequacy of the applicant's on-site stormwater management practices.

B.
Permit types.

(1)
General permit. An authorization for the connection as well as the discharge of stormwater or authorized nonstormwater discharge (per § 109-6A of this article) from properties occupied by private dwellings.

(2)
Connection permit. An authorization for connection as well as discharge authorized under § 109-13 of this article, as well as for a discharge permitted under a SPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the NYSDEC. This permit is subject to special terms and conditions by the Town Engineer. The permit will expire on or before the expiration of the NYSDEC SPDES permit, waiver or order or upon change of ownership or use of the property.

(3)

Special permit. An authorization for the connection as well as the discharge of stormwater or authorized nonstormwater discharge (per § 109-6A of this article) from all properties occupied by other than private dwellings.

C.
Permit fees. The following fee schedule:

(1)
General permit.

(a)
Application and filing fee: $25.

(b)
Inspection fee: None.

(2)
Connection permit.

(a)
Application and filing fee: $250.

(b)
Inspection fee: $500.

(3)
Special permit.

(a)
Application and filing fee: $250.

(b)
Inspection fee: $500.

D.
Inspection. All connections to the Town's MS4 shall be subject to the approval and inspection by the SMO and/or other appropriate agency as deemed necessary by the SMO. The applicant must notify the SMO at least 48 hours prior to commencing work and at least 48 hours prior to final restoration so that the inspection can be scheduled.

E.
Indemnification. The property owner shall indemnify and save the Town harmless from any loss, damage or expense, claims or suits arising out of and in conjunction with the installation and connection to the Town's MS4. In addition, the Town makes no guarantee that its MS4 will not become surcharged or otherwise overburdened and that water from the MS4 will not back up through the connection onto the owner's property. By making a connection, the applicant/owner assumes all of the risk and liability that may arise from it.

F.
Permit transfers. General permits may be transferred with the sale of a residential property, provided the use does not change. The new property owner shall comply with the terms and conditions of the transferred permit. Special permits are not transferable without approval of the SMO.

G.
Work within public roads. Any connection made within or involving work within a public road will also comply and be subject to any and all applicable codes and regulations pertaining to permits for work on and within public streets and roads. A permit under this article does not relieve the applicant from the permits under the foregoing codes and regulations.

H.

Other permits required. A connection permit issued pursuant to this article does not relieve the applicant from any and all other permits, permissions, or compliance with rules and regulations that may be required by federal, state, county, Town, and village government agencies or other public or private parties. This permit does not supersede any of the above.

I.
Permit rules and regulations. The SMO may promulgate rules and regulations for the permitting process within the constraints of this article.

§ 109-14 Applicability; access to facilities; monitoring of discharges.

A.
Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this article, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition that constitutes a violation of this article.

B.
Access to facilities.

(1)
The SMO shall be permitted to enter and inspect facilities public and private subject to regulation under this article as often as may be necessary to determine compliance with this article. If a discharger has security measures in force that require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.

(2)
Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this article.

(3)
The Town shall have the right to set up on any facility subject to this article such devices as are necessary in the opinion of the Town Engineer to conduct monitoring and/or sampling of the facility's stormwater or nonstormwater discharge.

(4)
The Town Engineer has the right to require the facilities subject to this article to install monitoring equipment as is reasonably necessary to determine compliance with this article. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater and nonstormwater flow and quality shall be calibrated to ensure their accuracy.

(5)
Unreasonable delays in allowing the Town access to a facility subject to this article are a violation of this article. A person who is the operator of a facility subject to this article commits an offense if the person denies the Town reasonable access to the facility for the purpose of conducting any activity authorized or required by this article.

(6)
If the SMO has been refused access to any part of the premises from which there exists a non-permitted stormwater or nonstormwater discharge to the MS4, and he/she is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this article or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

§ 109-15 Notification of spills.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release

of materials which are resulting or may result in illicit discharges or pollutants discharging into the MS4, said person shall take all necessary steps to ensure the recovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the SMO in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the SMO within three business days of the telephone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained by the owner for at least three years.

§ 109-16 Enforcement; penalties for offenses.

A.
Notice of violation.

(1)
When the SMO finds that a person has violated a prohibition or failed to meet a requirement of this article or a permit issued pursuant to this article, he/she may order compliance by written notice of violation to the responsible person. Such notice may require, without limitation, any or all of the actions listed below:

(a)
The elimination of illicit or unauthorized connections or discharges;

(b)
That violating discharges, practices, operations, activities, or connections shall cease and desist;

(c)
The abatement or remediation of stormwater pollution or contamination hazards and the restoration and/or remediation of any affected property;

(d)
The performance of monitoring, analyses, and reporting by a qualified professional;

(e)
Payment of a fine; and

(f)
The implementation of source control or treatment BMPs.

(2)
If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

B.
Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this article shall be guilty of a violation punishable by a fine not exceeding $1,000 or imprisonment for a period not to exceed two months, or both for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than $1,000 nor more than $2,500 or imprisonment for a period not to exceed two months, or both; and upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than $2,500 nor more than $5,000 or imprisonment for a period not to exceed two months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this article shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each day's continued violation shall constitute a separate additional violation. To the extent that

§ 268 of the New York State Town Law limits the fine schedule for a violation of any local law, ordinance or regulation to a fine not exceeding $350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense, both of which were committed within a period of five years, punishable by a fine not less than $350 nor more than $700 or imprisonment for a period not to exceed six months, or both; and, upon conviction for a third or subsequent offense, all of which were committed within a period of five years, punishable by a fine not less than $700 nor more than $1,000 or imprisonment for a period not to exceed six months, or both, § 268 of the New York State Town Law is superseded, nunc pro tunc, for the protection and enhancement of the Town's physical and visual environment and for the protection, order, conduct, safety, health and well-being of persons or property therein, pursuant to the Town's powers under § 10, Subdivision 1(ii)a(3)(11) and (12), of the Municipal Home Rule Law, as well as Article 9, § 2(b)(3), and Article 9, § 3(c)(10), of the New York State Constitution.

[Amended 12-16-2008 by L.L. No. 48-2008]

§ 109-17 Appeal of notice of violation.

Any person receiving a notice of violation may appeal within 15 calendar days of its issuance. The SMO shall hear the appeal within 30 days after the filing of the appeal, and within five days of making his/her decision, issue a decision by certified mail to the discharger. The SMO may conduct the hearing and take evidence or may designate any officer or employee of the Town to do so.

§ 109-18 Corrective measures after appeal.

A.
If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within five business days of the decision of the SMO, then the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.

B.
If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the property owner.

§ 109-19 Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this article. If a person has violated or continues to violate the provisions of this article, the SMO may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

§ 109-20 Alternative remedies.

A.
Where a person has violated a provision of this article, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Town Attorney and concurrence of the SMO, where:

(1)
The violation was unintentional.

(2)
The violator has no history of previous violations of this article.

(3)
Environmental damage was minimal.

(4)
The violator acted quickly to remedy violation.

(5)
The violator cooperated in investigation and resolution.

B.
Alternative remedies may consist of one or more of the following:

(1)
Attendance at compliance workshops.

(2)
Storm drain stenciling or storm drain marking.

(3)
River, stream or creek cleanup activities.

(4)
Other public service which is consistent with the objectives of the Town's stormwater management program.

§ 109-21 Violations deemed a public nuisance.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this article is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

§ 109-22 Remedies not exclusive.

The remedies listed in this article are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

§ 109-23 Multiple jurisdiction.

In the event that a discharge or connection constitutes a violation that is the responsibility of multiple MS4s, the violator may be subject to enforcement pursuant to any/all of the responsible MS4s' illicit discharge code or other relevant rules and regulations.

§ 109-24 When effective; repealer.

This article shall be in full force and effect immediately upon adoption. All prior chapters and parts of chapters in conflict with this article are hereby repealed.

Town of Riverhead Illicit Discharge and Detection Elimination Program

Goal: Develop and implement a program to detect and address non-stormwater discharges including illegal dumping in the Town of Riverhead (ToR) Municipal Separate Storm Sewer System (MS4) in accordance with current assistance and guidance documents from the state and EPA.

Reference Documents

1. NYS DEC MS4 Permit GP-0-10-002
2. Center for Watershed Protection (CWP) Illicit Discharge and Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments by CWP & Robert Pitt, October 2004.

1. Terminology and Key Concepts

- **a.** Illicit Discharge –
  - **i.** Illicit Discharges – storm drain that has a measurable flow during dry weather containing pollutants and/or pathogens. A storm drain with measurable flow but containing no pollutants is simply considered a discharge.
  - **ii.** Illicit discharges have a unique frequency, composition and mode of entry into the storm drain system (MS4).
- **b.** Storm Drain – Can be either an enclosed pipe or an open channel designed to convey stormwater downstream into either bodies of water, stormwater treatment units, and/or recharge basins.
- **c.** Discharge Frequency – the frequency of dry weather discharges in storm drains may be one of three conditions.
  - **i.** Continuous – Discharges occur most or all of the time, are usually easier to detect and typically produce the greatest pollutants.
  - **ii.** Intermittent - Discharges occur over a shorter period of time (e.g., few hours per day or a few days per year). These are hard to detect but can still represent a water quality problem.
  - **iii.** Transitory – discharges occur rarely, usually in response to a singular event such as an industrial spill, ruptured tank, sewer break, transport accident or illegal dumping episode. These can be the most toxic to the downstream environment. These can be observed by pavement/pipe staining, loss in pressure or in-operation of the upstream structure, or through spill reports.
- **d.** Flow Types
  - **i.** Sewage and Septage – produced from sewer pipes and septic systems.
  - **ii.** Washwater flows – wide variety – examples to be considered as illicit discharges include : Discharges of residential gray water, commercial carwash wastewater, floor washing to shop drains. These are detrimental to the environment as they contain significant amounts of detergents.
  - **iii.** Liquid wastes – wide variety – such as oil, paint, process water (radiator flushing water, plating bath wastewater, etc) that enter the storm drain system.
  - **iv.** Tap Water – pipe leaks of potable water – not considered a source of illicit discharge however can contribute to dry weather flows.

v. Landscape Irrigation – flows that occur when excess potable water used in residential and commercial – as long as water not mixed with chemicals (fertilizers or pesticides) not considered a source of illicit discharge but can contribute to dry weather flows.

vi. Groundwater & Spring Water – occur when the local water table rises above the bottom elevation of the inverts and enters into the storm drain either through cracks and joints, not considered a source of illicit discharge but can contribute to dry weather flows and also is an indicator that potential repairs are required to the system.

e. Modes of Entry

i. Direct – the discharge is directly connected to the storm drain pipe through a sewage pipe, shop drain or other kind of pipe.

1. Sewage Cross Connections – a sewer pipe that is improperly connected to the storm drain system that produces a continuous discharge of raw sewage to the pipe.
2. Straight Pipe – refers to relatively small diameter pipes that intentionally bypass the sanitary connection or septic drain fields, producing a direct discharge into open channels or streams.
3. Industrial and Commercial Cross Connections – these occur when a drain pipe is improperly connected to the storm drain system producing a discharge of wash water, process water or other inappropriate flows into the storm drain pipe.

ii. Indirect

1. Groundwater Seepage
2. Spills
3. Dumping a Liquid into a Storm Drain Inlet
4. Outdoor Washing Activities
5. Non-Target Irrigation from Landscaping

2. Mapping

By January of 2009-2010, the ToR had identified and mapped all known outfalls. Discharge locations included surface waters, recharge basins and stormwater leaching pools. The outfalls were identified by GIS review of aerial geography, through review of as-built subdevelopment site plans, by general windshield surveys, and by communication with the Building, Highway and Building and Grounds Departments for outfalls identified during normal field operations.

Subsequently field work was conducted during the winter of 2009-2010 to confirm locations of outfalls to surface waters per the NYSDEC definition of an MS4. Outfall locations were adjusted and omitted and/or added to the GIS database according to field findings.

3. Outfall Inventory

During the summer of 2010, outfall inventory reconnaissance was conducted to confirm locations of surface water, recharge basin and leaching pool outfalls identified during outfall mapping. Outfall Reconnaissance Inventory/Sample Collection Field Sheets were used to collect field data

for the inventory. Information collected included background data, outfall description, field data and physical indicators for any flowing outfalls, physical indicators for non-flowing outfalls and overall characterization. Many additional outfalls were found during the field reconnaissance and also through the discovery of additional existing construction plans. New outfalls will be mapped as they are constructed. Sample collection will be conducted of dry weather flows identified during this inventory after all collected data has been mapped and input to the data base.

Outfall reconnaissance inventoried within the Nitrogen and Pathogen impaired watersheds will be conducted at least once every five years, with reasonable progress each year.

In addition, approximately 20% of the Town's entire conveyance system will be mapped each year beginning in 2008 and ending in 2013. To date, approximately 75% of the mapping has been completed for the 40 miles of storm sewer system within the ToR. At a minimum, the map and supporting documentation for the conveyance system will include:

- Type of conveyance system - closed pipe or open drainage;
- Pipe material, shape, and size for closed pipe systems;
- Channel/ditch lining material, shape, and dimensions for open drainage systems;
- Location and dimensions of any culvert crossings;
- Drop inlet, catch basin, and manhole locations; and
- Number and size of connections (inlets/outlets) to catch basins and manholes and direction of flow.

Preliminary sewersheds were delineated by the Town during the winter of 2010. This delineation included all outfalls discharging to surface waters within Town boundaries. The delineation was performed initially from GIS topography and confirmed by field investigations of the sewersheds. These boundaries will be reconfigured based on the additional outfalls found during recent field reconnaissance and storm sewer construction plans review. Many outfall locations will also be adjusted based on the field work and plan examination. As during the initial delineation, GIS sewersheds will be confirmed in the field.

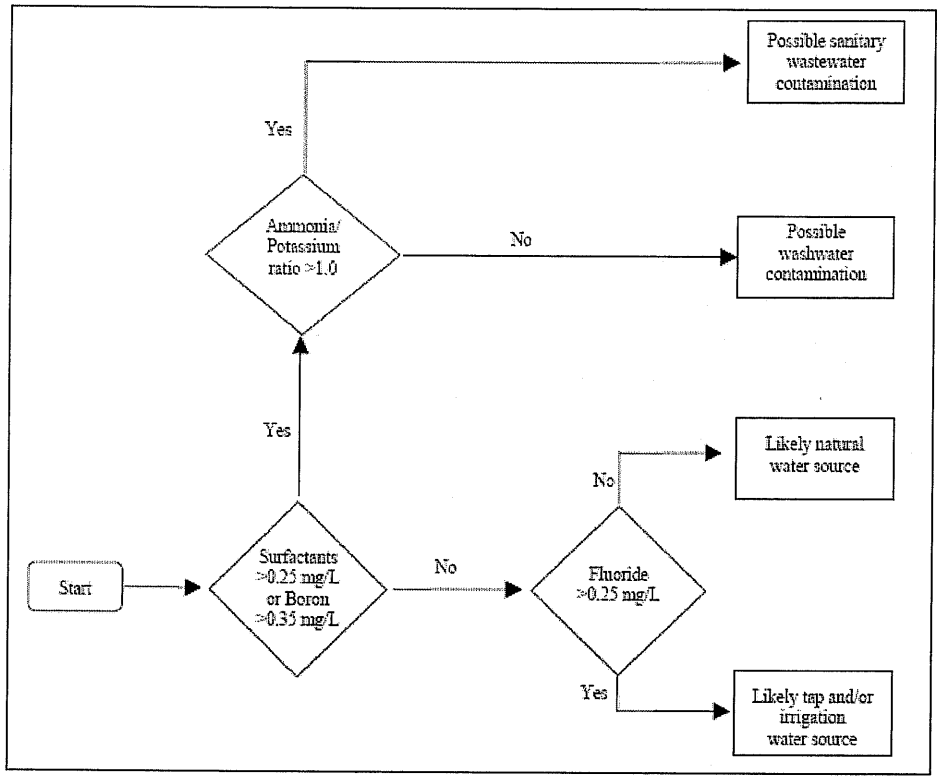
4. Dry Weather Flow Monitoring

Outfalls having dry weather flow during the initial outfall inventory will be revisited after at least 48 hours of no rain, on three separate occasions and at least two weeks apart. If dry weather flow is present on any of the three occasions, the outfall will be revisited to collect water quality data.

- Temperature and salinity will be measured using the YSI 30 by collecting the discharge in a sample bottle and inserting the probe to obtain a reading. The sample may be discarded after the reading is taken. The sample bottle may be reused for measuring temperature and salinity at other outfall pipes; however, it will be rinsed out with deionized water between uses.

- Autoclaved sample bottles will be used to collect samples for analysis of surfactants, potassium, ammonia, and chlorine.

The chart below and water quality results will be used to determine if an illicit discharge/connection is present.



In addition to testing for the above parameters, samples for fecal coliform will be collected analysis. To collect a sample for fecal coliform analysis, the Town will use an autoclaved sample bottle. The sample is placed in ice, in a cooler. If high fecal coliform counts are found, the sample is preserved for possible DNA analysis (a tool that is used to identify the source of the pathogens).

5. Procedures for Identifying Priority Areas of Concern (Geographic, audiences, or otherwise) for the IDDE Program.

The ToR has several different land uses within its municipal boundaries. The more urban areas have been developed along State and County Roadways (SR 25 and CR 58). These areas have been designed with positive drainage systems, albeit inter-connecting catch basins conveying stormwater to an outfall. Other more rural areas of Town have been developed with isolated leaching structures.

Older residential neighborhoods were often designed with easement areas located at the low points in roadways and no true conveyance system constructed. This was to save on development costs. Riverhead Town Codes require residential neighborhoods be designed with a positive drainage system discharging to a recharge basin sized to account for either a 5" rain event (if safe overflow is provided), or a 8" rain event (if no safe overflow is provided).

The current Riverhead Town Codes for commercial development require developers to maintain all roof runoff on site, and to design stormwater facilities to contain a minimum of 2" of rain fall on site. In 2011, the ToR will incorporate the new stormwater design manual into the site plan requirements for the ToR.

The Town of Riverhead has identified two different priorities: impaired surface water bodies, land use types and older residential subdivisions to target for its IDDE program

a. The Town of Riverhead has identified its impaired surface water bodies as a primary target of concern for its IDDE Program. The Meetinghouse Creek Watershed is comprised of two different MS4 regulatory agencies, the NYSDOT and ToR. The Peconic River Watershed is comprised of three different MS4 regulatory agencies, NYSDOT, SCDPW, and ToR. Terry's Creek Waterhsed is comprised of three different MS4 Regulatory agencies, NYSDOT, SCDPW and the ToR. The Long Island Sound watershed is shared by SCDPW and ToR.

The ToR has identified its impaired surface water bodies as its primary areas of concern.

i. Meetinghouse Creek Watershed
ii. Peconic River Watershed
iii. Peconic Bay Watershed
iv. Terry's Creek Watershed
v. Long Island Sound Watershed

b. Land Uses of Concern – Since the ToR has nitrogen and pathogen watershed improvement strategies, land uses that contribute to nitrogen and pathogen pollutants have been identified. We have identified the following land uses within the ToR, sorted by their proximity to either a MS4 structure or a surface water body and will be mapping them through the GIS system for inspection tracking purposes. These land uses of concern are presented by location in Appendix C.

i. Animal Care/Kennel Facilities
ii. Auto Repair and Fuel Filling Stations
iii. Bulk fuel storage
iv. Golf Courses
v. Fertilizer and Pesticide distributors.
vi. Farm Lands
vii. Funeral and Crematorium locations
viii. Older Residential Developments within impaired watershed areas.

6. Available Equipment

a. The Town of Riverhead Sewer District (RSD) – currently has a camera that is used in viewing blockages within its Sanitary Sewer Lines. This camera has been shared with other departments (HwY and B&G) in the past as will remain the current practice to determine breaks, connections, contents of underground drainage systems, including but not limited to pipes, catch basins, leaching pools, etc.

b. The RSD currently utilizes smoke testing as a method to determine stormwater connections into the sanitary sewer lines. As the ToR does not have a combined system, non sanitary waste lines entering into the sanitary sewer lines can inundate the Waste Water Treatment Plant (WWTP) and cause it to exceed its capacity. The Engineering Department has utilized this equipment in the past to ascertain pipe orientations and possible illicit connections.

c. The RSD and the Engineering Department utilize dye testing as a means for tracing water flow through pipe conveyance systems. This is a useful tool in determining illicit discharge paths.

d. The Town of Riverhead Highway Department currently has three vacuum trucks that it utilizes in the cleaning of drainage structures including but not limited to catch basins, leaching pools and storm drain pipes.

7. Staff

a. **Ken Testa, P.E., Town Engineer** – Mr. Testa oversees the Engineering Department and Stormwater Management Office on its day to day functions. Mr. Testa reports directly to the Town of Riverhead Town Board, who ultimately make decisions concerning the operations of the Town.

b. **Christine Fetten, P.E., Assistant Town Engineer** – Ms. Fetten participates in the day to day functions of the Engineering Department. Ms. Fetten along with Drew Dillingham compile annual information pertaining to the MS4 Annual Reporting requirements. Ms. Fetten, Mr. Dillingham, and Mr. McCormick consult on a regular basis in regards to the MS4 requirements, tracking, legal authorities, etc. for all MCMs, and Watershed Improvement Strategies. Ms. Fetten regularly attends Peconic Estuary MS4 meetings to participate in watershed MS4 opportunities.

c. **Drew Dillingham, P.E., CPESC Civil Engineer** – Mr. Dillingham has been actively overseeing the operations of the MS4 requirements. He works very closely with Mr. Hubbs and Ms. Fetten in developing sub-watershed mapping, outfall reconnaissance and infrastructure mapping. Mr. Dillingham reviewed the Meetinghouse Creek watershed management plan developed by Horsely and Whitten , sponsored by the Peconic Estuary Program (PEP) and developed a workable plan for implementation that did not require private property acquisition and/or easements over private property. Mr. Dillingham regularly attends Peconic Estuary MS4 Meetings to participate in watershed MS4 opportunities.

d. **Robert Hubbs, GIS Supervisor** – Mr. Hubbs has worked diligently on developing the ToR's GIS Mapping system. All employees with desktop access can access the ToR's GIS system. Mr. Hubbs has made himself available for training opportunities to town staff. Mr. Hubbs has been working on a naming convention so that all MS4 structures may be identified in the field by HWY staff during cleaning operations so they may be better tracked. In the near future the ToR will begin tracking the IDDE program and cleaning program on the GIS system.

e. **Daniel McCormick, Assistant Town Attorney** – Mr. McCormick is the legal counsel for the ToR's MS4 Program. Mr. McCormick works closely with the Engineering Department and Town Board to adopt Town Code adoptions for Construction Site Stormwater Controls, Illicit Discharge Detection and Elimination, Goose Feeding

Prohibition and other Watershed Improvement Strategy Code adoptions. Mr. McCormick receives stormwater questions from the Engineering Department and issues Legal Opinions as warranted. Mr. McCormick regularly attends Peconic Estuary MS4 Meetings to participate in watershed MS4 opportunities.

f. **George Woodson, Riverhead Highway Department Superintendent** –Mr. Woodson is an elected Superintendent of the Town of Riverhead Highway Department. Mr. Woodson, since becoming the superintendent of Highways has diligently dedicated staff to the maintenance of MS4 structures. Mr. Woodson sends staff to training on MS4 operations, good housekeeping and IDDE. HwY staff contact the Engineering Department with potential illicit discharge issues.

g. **Michael Reichel, Riverhead Sanitary Sewer District Superintendent** – Mr. Reichel is the superintendent to the Town's two sewer districts, the Riverhead Sewer District (RSD) and the Calverton Sewer District (CSD). There are two wastewater treatment plants (WWTP) within each district and the RSD also runs a scavenger waste plant which takes in sewage from pump trucks. Mr.Reichel has provided his staff and assistance to the Engineering Department and the Highway Department in the use of the camera, smoke testing and dye testing for tracking potential illicit discharges.

8. **Funding –**

   a. **Operational Costs** – The Town currently funds personnel from the Engineering Department and the Town Attorney's Office that work on MS4 Permit requirements through its operating budget. In 2011, the Town hopes to segregate out a separate Stormwater Staff allocation to better track resources used in this program. The sewer department and highway department staff are funded through the Town operational costs but are paid for through separate taxing districts. MS4 cleaning operations, IDDE program requirements, SWPPP review and inspections, public pamphlets and posters and other public education and involvement activities are funded out of operational costs.

   b. **Capital Improvement Costs** – Large scale projects such as infrastructure replacement and watershed improvement strategy implementations are generally paid out of a Capital Improvement Project (CIPs). Generally CIPs are funded through either bonding or town budgets coupled with grant monies (shared).

   c. **Grant Opportunities** – The Town has had great success in securing grant funds for the implementation of MS4 projects. The Town has purchased boater pumpout boats, and boater pumpout stanchions through grant monies. The Town has performed stormwater retrofits out of grant monies.

9. **Procedures for identifying and locating Illicit Discharges (trackdown)**

   a. **Pollution Reporting Hotline** The ToR maintains a website and public access television channel. In September 2010, the Town will revise the website page to include a dedicated call in number to report potential illicit discharges to the Engineering Department. The Engineering Department telephone line is currently listed on all of the educational pamphlets that are available at Town facilities that experience a large amount of public traffic. This information along with educational video programs will be posted to our Channel 22 television station.

When a telephone call or statement is made of a potential illicit discharge, the Engineering Department personnel as listed in Section 4, will begin an *Illicit Discharge Hotline Incident Tracking Sheet* (IDHTS). The IDHTS will be initially be filled out with the reporter's information (see Figure 6).

Figure 6-1 – Illicit Discharge Hotline Incident Tracking Sheet

Illicit Discharge Hotline Incident Tracking Sheet

Incident ID:

Responder Information	
Call taken by:	Call date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time:	Incident date:

Caller contact information (*optional*):

Incident Location *(complete one or more below)*

Latitude and longitude:

Stream address or outfall #:

Closest street address:

Nearby landmark:

Primary Location Description	**Secondary Location Description:**		
☐ Stream corridor *(In or adjacent to stream)*	☐ Outfall	☐ In-stream flow	☐ Along banks
☐ Upland area *(Land not adjacent to stream)*	☐ Near storm drain	☐ Near other water source (storm water pond, wetland, etc.):	

Narrative description of location:

Upland Problem Indicator Description

☐ Dumping	☐ Oil/solvents/chemicals	☐ Sewage
☐ Wash water, suds, etc.	☐ Other: _____	

Stream Corridor Problem Indicator Description

Odor	☐ None	☐ Sewage	☐ Rancid/Sour	☐ Petroleum (gas)
	☐ Sulfide (rotten eggs); natural gas	☐ Other: Describe in "Narrative" section		
Appearance	☐ "Normal"	☐ Oil sheen	☐ Cloudy	☐ Suds
	☐ Other: Describe in "Narrative" section			
Floatables	☐ None:	☐ Sewage (toilet paper, etc)	☐ Algae	☐ Dead fish
	☐ Other: Describe in "Narrative" section			

Narrative description of problem indicators:

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Investigation Notes	
Initial investigation date:	Investigators:
☐ No investigation made	Reason:
☐ Referred to different department/agency:	Department/Agency:
☐ Investigated: No action necessary	
☐ Investigated: Requires action	Description of actions:
Hours between call and investigation:	Hours to close incident:
Date case closed:	
Notes:	

b. Drainage Area Investigations – Following the initial call and beginning of a IDHTS, the Engineering Department will perform a desk top review of all information pertinent to the land area reported. The Town will utilize the GIS system to determine local land use, permitted facilities (NYSDEC/ACOE), property ownership, aerial review and what stormwater infrastructure is within this area.

c. Trunk Investigations and On Site Discharge Investigations - Once the background information is determined a inspection crew will be deployed to perform trunk investigations and site discharge investigations. The Engineering Department will consult with the Town Attorney's office to discuss the project and any legal issues associated with the project. Considerations shall be given to type of mode of entry, flow type and frequency. If the illicit discharge is within the system and not from an apparent

property connection, than a trunk investigation will be initiated with the aid of the Highway Department and GIS to determine the next upstream structure that shows the illicit flow. When a structure is encountered that does not show the illicit flow, than the connection will lie somewhere between the two. At this point in time, the Engineering Department along with the Highway Department and the Sewer Department will utilize the pipe camera to determine the size and type of connection. The Town will then begin the on-site investigation to determine the actual source of the illicit connection from within the private property through either smoke or dye testing.

d. Septic System Investigations - The ToR has a Town Code Chapter 88 entitled Sewers (Appendix A). Paragraph 41 of this chapter allows for the inspection at a rate of once per five years by the Town of Riverhead. Within this code, the frequency, right of entry and right to remove grass, topsoil and/or dirt shall be allowed. The Town will consider amending this code in 2010 to allow for a third party consultant in the form of a licensed plumber to certify septic systems and provide this report to the Town to include the following information:

i. Type of Structures – quantity and locations
ii. Inlets/Outlets – quantity and locations
iii. General assessment of structural integrity and if any outlets occur past the last mapped leaching pool.

These will be submitted to the Sewer District and then be further distributed to the Engineering Department for database filing purposes.

10. Procedures for Eliminating Illicit Discharges

a. Chapter 109 of Town Code – In 2007, the Town Board adopted by resolution a new Town Code Chapter -109 entitled Storm Sewers (Appendix B). Within this new code, illicit discharges were defined along with several other terms. The Town's procedures for eliminating illicit discharges are outlined in this chapter and address the ToR's ability to access facilities, to suspend access to the MS4, allow for connection permits the ToR's Enforcement procedures outlining a penalty fee schedule.

11. Procedures for Documenting Actions

a. A hotline call activates the following procedures:

i. Date Call is logged – registered on the IDHTS
ii. Drainage Area Investigation initiated and conducted – information compiled in a file folder
iii. Trunk Line Survey – documented by both the IDHTS and a photo summary
iv. Private Property Survey- documented by the IDHTS and a photo summary.
v. If violation is determined then SMO may order compliance by Written Notice of Violation (NOV) with an outline of corrective measures to be taken and timeframe of compliance.

If a violation has not been corrected pursuant to the requirements set forth in the NOV, the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonable necessary to abate the violation. If there is refused access to the property, the Town may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. If the violation has occurred, the Town will seek a court order to take action to reasonably abate the violation to restore the property. The cost of these measures shall be the sole responsibility of the property owner.

b. Penalties

i. First Offense – a fine not exceeding $1,000 or imprisonment for a period not to exceed 2 months.

ii. Second Offense – within five years, punishable by a fine not less than $1,000 or more than $2,500 or imprisonment for a period not to exceed two months , or both.

iii. Third Offense- within a period of five years, punishable by a fine not less than $2,500 nor more than $5,000 or imprisonment for a period not to exceed two months or both.

BMP SUMMARY SHEET	
MS4 Name:	Town of Riverhead
Minimum Control Measure:	3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION
Unique BMP Indentification Number:	
BMP Title	Storm Sewer System Map

Permit Description:

You must develop a storm sewer system map by xx, xx, xxx

BMP Description

A storm sewer system map will be developed to provide a basic awareness of the intake and sicahrge areas within the storm water system, help coordinate management activities and provide information on how to determine possible sources of dry weather flows. The map will also assist the Town in tracking storm drain system management actions. The map will include at a minimum public piping systems that are greater than or equal to 12 inches in diameter and include leaching pools, catch basins, manholes, and recharge basins that the Town has operational control. It will also contain information on County and State systems.

Location(s) in SWMP of detailed information relating to this BMP:

Measurable Goals	**2012**	**2013**	**2014**	**2015**
Base Map is complete				
Complete map updates annually				

Timeline/Implementation Schedule:

Annual updates to the existing storm sewer map will be made to correct existing information or add information on items such as new developments or structures found during field evaluations.

Specific Components and Notes:

1 Storm drain system map developed as layers in ArcView GIS
2 Map data correlated with Sql Server 2005 (Eqv to Microsoft Access database) as available
3 The map will show the location of items within public ownership or under drainage and utility easement, such as:
   a. Ponds, streams, lakes and wetlands that are part of the storm water management system
   b. Structural pollution control devises that are part of the system
   c. Pipes & conveyances that are 12" in dia. & over
   d. Outfalls, inclding discharges to other MS4s, waters & ditches that are not part of the system
   e. Overland discharge points
   f. Known locations of confirmed illicit discharges

Responsible Party for this BMP:.

Department:	Engineering / GIS
Name:	Robert Hubbs
Phone:	631-727-3200-201
E-mail:	hubbsr@riverheadli.com

Town of Riverhead IDDE Tracking Database - 2010

cident ID	Location	Owner	Address	SCTM NO.	Date of Report	Date of Inspection	Inspector	Date of 1st NOV	Date of Owner Response	Resolved	Date of Second NOV	Resolved after 30 days
	Wading River	Michael LaShier	126 Overhill	72-1-37		12/17/2008	Christine	12/19/2008 ToR NOV1	12/22/2008 Pool Backwash Hose	y		
	Baiting Hollow	Robert Sinclair	379 Oakleigh			11/7/2008	Christine Fetten	11/7/2008 ToR NOV(1)	11/17/08 New Owner will remediate after			
	Riverhead	Orion Atkinson	75 Joyce Drive			11/7/2008	Christine Fetten	11/7/2008 ToR NOV(1)	owner constructed perforated pipe and			
	Aquebogue	Ms. Carolyn Walter	9 Church Lane	067-01-013	2/3/2010	2/3/2010	Christine Fetten	2/4/10 TOR NOV	3/4/10 Owner to Resolve	n.	5/3/10 TOR NOV 2	n
	Aquebogue	Mr. John Wade	22 Church Lane	067-2-22	2/3/2010	2/3/2010	Christine Fetten	2/4/10 Tor NOV				
	Jamesport	Laura Zylinski	89 Morningside Ave	89-1-16.2		3/22/2010	Christine Fetten	3/22/2010 ToR NOV (1)				
	Aquebogue	Robert Beodeker	171 Crystal Drive	67-2-16.17		6/29/2010	Drew Dillingham	6/29/2010 ToR NOV1				
	Riverhead	Rafael Marca	1118 West Main Street	67-2-16.17		7/22/2010	Drew Dillingham	7/22/2010 ToR NOV (1)	7/28/2010 owner states its groudnwater from			
	Wading River	Michael Stella	124 Meadow Path	73-1-1.56		8/4/2010	Drew Dillingham	8/3/2010 ToR NOV (1)			8/4/2010 ToR NOV(2)	
	Wading River	Mr. Kenzig	40 Gladys Road	31-1-31		8/18/2010	Christine Fetten	8/18/2010 ToR NOV (1)	8/20/2010 pool backwash hose to be re routed			
	Wading River	Daniel Fortuna	108 South Road	67-2-16.17		8/18/2010	Christine Fetten	8/18/2010 ToR NOV (1)	8/23/2010 Owner called discharge is pool			
	Wading River	Thomas Kirkpatrick	11 Grassy Knoll	73-1-1.41		8/18/2010	Drew Dillingham	8/18/2010 ToR NOV (1)	1/0/1900			
	Aquebogue	Christakis Kyprianou	84 Peacock Path	21-2-13.7	9/16/2010	10/6/2010	DED	10/7/2010 TOR NOV (1)	1/0/1900			
	Baiting Hollow	Kevin Lucas	184 Southfield Rd	79-1-15.30	9/16/2010	10/6/2010	Drew Dillingham	Follow up with inspection next summer during pool season.	1/0/1900			
			Grangebel Park - Bridal Veils		10/29/2010	10/29/2010	CPF	Not applicalbe	Capital Project underground drain - remain in site			
			146 High Meadow Court, Jamesport		11/3/2010		CPF					

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	89 Morningside Ave		
Responder Information			
Call Taken by:	CPF	Call Date:	11/12/2010
Call time:	9:30	Precipitation (inches) in past 24-48 hrs: 0	
Reporter Information			
Incident time	9:00	Incident date: 11/12/2010	

Caller contact information

Lt. Lessard, Town of Riverhead

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #			
Closest street address: 89 Morningside Ave			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
__X__Upland Area	____Near Storm Drain	_X___Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Sump pump discharge from basement. Outlet location is middle of south side of house. Home is in proximity of Flanders Bay.

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	____None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Laura Zylinski

SCTM NO.0600-089-1-16.2

Address 89 Morningside Ave
Riverhead, NY 11901

Investigation Notes

Initial Investigation date3/22/10 Investigators Code Enforcement

____No investigation made	Reason:
__X__ Referred to different department/agency	Department/Agency: Police Dept

____Investigated: No action necessary

__X__Investigated: Requires action	Description of actions: Cease pumping water from sump pump
Response: Pumping stopped but began again after of couple of months of non operation.	Follow Up Action (2nd) Letter of second violation
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	184 Southfield Rd, Baiting Hollow		
Responder Information			
Call Taken by:	Christine Fetten	Call Date: Field visit	9/16/2010
Call time:		Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time	AM	Incident date:	9/16/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	184 Southfield Rd, Baiting Hollow		
Closest street address:			
Nearby Landmark:	Recharge Basin		
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
__x__Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Christine Fetten witnessed piping during EPA IDDE inspection - appears to be coming from pool area

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Christine Fetten witnessed piping during EPA IDDE inspection - appears to be coming from pool area

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Kevin Lucas

SCTM NO. 79-1-15.30

Address 184 Southfield Rd Baiting Hollow

Investigation Notes

Initial Investigation date 10/6/2010 Investigators Drew Dillingham

____No investigation made	Reason:
____ Referred to different department/agency	Department/Agency:

_X___Investigated: No action necessary

____Investigated: Requires action	Description of actions:
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

Pool discharge piping removed from fence back to pool filter.

Follow up with inspection next summer during pool season.

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:			
Responder Information			
Call Taken by:	CPF	Call Date:	10/29/2010
Call time:	10:00	Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time	9:00	Incident date:	

Caller contact information

Mike Post from Terry Contracting called regarding two pipes they found coming out of the south side of bridal veils falls.

He thought he saw some degraded paper coming out of them.

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #			
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	____None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name

SCTM NO.

Address

Investigation Notes

Initial Investigation date	Investigators
____No investigation made	Reason:
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions:
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by: Chris Fetten	Call Date: 2/3/2010
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date:

Caller contact information

Highway Department Called in.

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	9 Church Lane		
Closest street address:	NYS 25		
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Coming off residential property entering into ToR CB

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	____None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Ms. Carolyn Walter

SCTM NO. 067-01-013

Address 9 Church Lane Aquebogue

Investigation Notes			
Initial Investigation date	2/3/2010	Investigators	Christine Fetten
____No investigation made		Reason:	HWY Call
____ Referred to different department/agency		Department/Agency:	
____Investigated: No action necessary			
____Investigated: Requires action		Description of actions:	2/4/10 TOR NOV
Response:	3/4/10 Owner to Resolve	Follow Up Action (2nd)	5/3/10 TOR NOV 2
Response		Follow up action (3rd)	
Hours between call and invesigation:		Hours to Close incident	
Date case closed:			
Notes			

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by: Chris Fetten	Call Date: 2/3/2010
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date:

Caller contact information

Highway Department Called in.

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	22 Church Lane		
Closest street address:	NYS 25		
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	____None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Appears to be rusty water following a line coming from residential property, daylighting adjacent to CB

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Mr. John Wade

SCTM NO. 067-2-22

Address 22 Church Lane Aquebogue

Investigation Notes	
Initial Investigation date 2/3/2010	Investigators Christine Fetten
____No investigation made	Reason: HWY Call
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 2/4/10 Tor NOV
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date:

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	171 Crystal Drive		
Closest street address:	NYS 25		
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
___Stream Corridor	___Outfall	___In Stream Flow	___Along Banks
___Upland Area	___Near Storm Drain	___Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Coming off residential property entering into ToR CB

Upland Problem Indicator Description				
___Dumping		___Oil/Solvents/chemicals		___Sewage
___Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	___None	___Sewage	___Rancid / sour	___Petroleum
	___Sulfide (rotten eg	___Other		
Appearance	___x_Normal	___Oil Sheen	___Cloudy	___Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Robert Beodeker

SCTM NO. 67-2-16.17

Address 171 Crystal Drive Aquebogue

Investigation Notes

Initial Investigation date	6/29/2010	Investigators	Drew Dillingham

____No investigation made	Reason: HWY Call
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 6/29/2010 ToR NOV1
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date:

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	171 Crystal Drive		
Closest street address:	NYS 25		
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Coming off residential property entering into ToR CB

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming from corner of home		
Stream Corridor Problem Indicator Description				
Odor	____None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Robert Beodeker

SCTM NO. 67-2-16.17

Address 171 Crystal Drive Aquebogue

Investigation Notes

Initial Investigation date	6/29/2010	Investigators	Drew Dillingham

____No investigation made	Reason: HWY Call
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 6/29/2010 ToR NOV1
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time 8/18/2010	Incident date: 8/18/2010

Caller contact information

Dan McCormick and Christine Fetten witnessed discharge piping during South Road Drainage Inspections

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	40 Gladys Road		
Closest street address:	South Road		
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Witness blue flex hose coming out of the pool fence

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Mr. Kenzig

SCTM NO. 31-1-31

Address 40 Gladys Road Wading River

Investigation Notes

Initial Investigation date	8/18/2010	Investigators	Christine Fetten

____No investigation made	Reason: Engineering Witnessed
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 8/18/2010 ToR NOV (1)
Response: 8/20/2010 pool backwash hose to be re routed	Follow Up Action (2nd) re-inspect 9/18/2010
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time 8/18/2010	Incident date: 8/18/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	11 Grassy Knoll		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

plastic piping adjacent to catch basin

Upland Problem Indicator Description			
____Dumping	____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.	Other:Appears to be coming pool		

Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

plastic piping oriented in an east-west direction and parallel to the rear property line.

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Thomas Kirkpatrick

SCTM NO. 73-1-1.41

Address 11 Grassy Knoll Wading River

Investigation Notes

Initial Investigation date	8/18/2010	Investigators	Drew Dillingham

____No investigation made	Reason:	Engineering Witnessed
____ Referred to different department/agency	Department/Agency:	

____Investigated: No action necessary

____Investigated: Requires action	Description of actions:	8/18/2010 ToR NOV (1)
Response:	Follow Up Action (2nd)	
Response	Follow up action (3rd)	
Hours between call and invesigation:	Hours to Close incident	

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time 11/7/2008	Incident date: 11/7/2008

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	75 Joyce Drive		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

plastic piping adjacent to catch basin

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

direct piping of roof drainage

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Orion Atkinson

SCTM NO.

Address 75 Joyce Drive Riverhead

Investigation Notes

Initial Investigation date	8/18/2010	Investigators	Christine Fetten

___No investigation made	Reason: HWY called
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action		Description of actions:	11/7/2008 ToR NOV(1)
Response:	owner constructed perforated pipe and diffused water	Follow Up Action (2nd)	11/19/2008 Tor Follow Up ltr
Response	Issue Remediated	Follow up action (3rd)	
Hours between call and invesigation:		Hours to Close incident	

Date case closed:

Notes

Discharge occurs during rain and adds to overwhelmed drainage area

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date: 8/4/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	124 Meadow Path		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

plastic piping adjacent to catch basin

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Pipe through curb line

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Michael Stella

SCTM NO. 73-1-1.56

Address 124 Meadow Path Wading River

Investigation Notes

Initial Investigation date	6/3/2010	Investigators	Drew Dillingham

____No investigation made	Reason:	HWY called
____ Referred to different department/agency	Department/Agency:	

____Investigated: No action necessary

__X__Investigated: Requires action	Description of actions:	6/3/2010 ToR NOV (1)
Response:	Follow Up Action (2nd)	8/4/2010 ToR NOV(2)
Response Disch pipe moved north 10' under bush. Still outlets to road	Follow up action (3rd)	Propose fine.
Hours between call and invesigation:	Hours to Close incident	

Date case closed:

Notes

plastic pipe orientated in an east-west direction and parallel to the northern property line. No discharge was witnessed during inspection. Pipe located south of catch basin

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:			
Responder Information			
Call Taken by:	Christine Fetten	Call Date:	3/22/2010
Call time:		Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time		Incident date:	3/22/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	89 Morningside Ave		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

perforated bag discharging clear fluids

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Code Officer called that green plastic perforated bag system eminating from the underside of deck.

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Laura Zylinski

SCTM NO. 89-1-16.2

Address 89 Morningside Ave Jamesport

Investigation Notes

Initial Investigation date	3/22/2010	Investigators	Christine Fetten

____No investigation made	Reason:	Code Enforcement Called
____ Referred to different department/agency	Department/Agency:	

____Investigated: No action necessary

____Investigated: Requires action	Description of actions:	3/22/2010 ToR NOV (1)
Response:	Follow Up Action (2nd)	
Response	Follow up action (3rd)	
Hours between call and invesigation:	Hours to Close incident	

Date case closed:

Notes

discharge appeared to be basement pumping after rain. End of March rains occurred shortly after.

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:			
Responder Information			
Call Taken by:	Christine Fetten	Call Date:	11/7/2008
Call time:		Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time		Incident date:	11/7/2008

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	Long Island Sound		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

direct piping of roof drainage

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

During inspection of Oakleigh Ave, witnessed roof runoff to Oakleigh, side slope below overhanging deck is eroding.

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Robert Sinclair

SCTM NO. Ben Karlin

Address 379 Oakleigh Baiting Hollow

Investigation Notes

Initial Investigation date	11/7/2008	Investigators	Christine Fetten

____No investigation made	Reason:
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action		Description of actions:	11/7/2008 ToR NOV(1)
Response:	11/17/08 New Owner will remediate after Oakleigh reconstructed	Follow Up Action (2nd)	2010 Oakleigh Reconstructed
Response		Follow up action (3rd)	
Hours between call and invesigation:		Hours to Close incident	

Date case closed:

Notes

Roof runoff piping conveyed to steep slope area, high possibility for erosion

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date:

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	126 Overhill Road		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Coming off residential property entering into ToR RB

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name Michael LaShier

SCTM NO. 72-1-37

Address 126 Overhill Wading River

Investigation Notes

Initial Investigation date 12/17/2008 Investigators Christine

____No investigation made	Reason: HWY Call
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 12/19/2008 ToR NOV1
Response: 12/22/2008 Pool Backwash Hose Removed	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	64 Peacock Path		
Responder Information			
Call Taken by:	Dan McCormick	Call Date: Field visit	9/16/2010
Call time:		Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time		Incident date: 9/16/10	

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	Peacock Path		
Closest street address:	65 Peacock Path		
Nearby Landmark: Aquebogue	Christakis Kyprianou	64 Peacock Path	21-2-13.7

Primary Location Description	**Secondary Location Description**		
____Stream Corridor	__X__Outfall	____In Stream Flow	____Along Banks
_X___Upland Area	_X___Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Coming off residential property entering into ToR CB

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be from roof drain		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Name		Christakis Kyprianou
SCTM NO.	21-2-13.7	
Address	64 Peacock Path	Aquebogue

Investigation Notes

Initial Investigation date	10/6/2010	Investigators	DED

____No investigation made	Reason:	Site visit during EPA audit
____ Referred to different department/agency	Department/Agency:	

____Investigated: No action necessary

__x__Investigated: Requires action	Description of actions:	10/7/2010 TOR NOV (1)
Response:	Follow Up Action (2nd)	
Response	Follow up action (3rd)	
Hours between call and invesigation:	Hours to Close incident	

Date case closed:

Notes

No discharge witnessed during insepction

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:			
Responder Information			
Call Taken by:	Christine Fetten/Drew	Call Date:	
Call time:		Precipitation (inches) in past 24-48 hrs:	
Reporter Information			
Incident time		Incident date:	7/8/2010

Caller contact information

Notice of Violation forwarded over from Code Enforcement with wrong address DED Performed inspection 7/19/2010 -
No illicit discharge

Follow up call from Code Enforcement in August; neighbor dispute on landscaping irrigation at 25 Smugglers Path

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #			
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location
direct piping of roof drainage

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Suspected Violator (name, personal or vehicle description, license plate #, etc.):
Property Owner Name
SCTM NO.
Address

Investigation Notes

Initial Investigation date	3/22/2010	Investigators	Christine Fetten

____No investigation made	Reason: Code Enforcement Called
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action	Description of actions: 3/22/2010 ToR NOV (1)
Response:	Follow Up Action (2nd)
Response	Follow up action (3rd)
Hours between call and invesigation:	Hours to Close incident

Date case closed:

Notes

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date: 8/18/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	220 Sound Road		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Dan McCormick and Christine Fetten witnessed piping during South Road drainage inspection - appears to be coming from pool area

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

Dan McCormick and Christine Fetten witnessed piping during South Road drainage inspection - appears to be coming from pool area

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Daniel Fortuna

SCTM NO. 30-3-14

Address 108 South Road Wading River

Investigation Notes

Initial Investigation date 8/18/2010 Investigators Christine Fetten

____No investigation made	Reason:
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

__X__Investigated: Requires action		Description of actions:	8/18/2010 ToR NOV (1)
Response:	8/23/2010 Owner called discharge is pool backwash-will contain on site	Follow Up Action (2nd)	10/6/2010
Response	Pipes removed from fence and no longer visible.	Follow up action (3rd)	
Hours between call and invesigation:		Hours to Close incident	

Date case closed: 10/6/2010

Notes

Pool Discharge appears to be piped to fence line causing erosion of slope

ILLICIT DISCHARGE HOTLINE INCIDENT TRACKING SHEET

Incident ID:	
Responder Information	
Call Taken by:	Call Date:
Call time:	Precipitation (inches) in past 24-48 hrs:
Reporter Information	
Incident time	Incident date: 7/22/2010

Caller contact information

Incident Location (complete one or more below)			
Latitudde and longitude:			
Stream address or outfall #	1118 West Main Street		
Closest street address:			
Nearby Landmark:			
Primary Location Description	**Secondary Location Description**		
____Stream Corridor	____Outfall	____In Stream Flow	____Along Banks
____Upland Area	____Near Storm Drain	____Near other water source (stormwater pond, wetland, etc)	

Narrative description of location

Upland Problem Indicator Description				
____Dumping		____Oil/Solvents/chemicals		____Sewage
____Wash water, suds, etc.		Other:Appears to be coming pool		
Stream Corridor Problem Indicator Description				
Odor	_x_None	____Sewage	____Rancid / sour	____Petroleum
	____Sulfide (rotten eg	____Other		
Appearance	___x_Normal	____Oil Sheen	____Cloudy	____Suds
	Other: Describe in "Narrative" section			
Floatables	None: x	Sewage (toilet paper, etc)	Algae	Dead fish
	Other: Describe in "Narrative" section			

Narrative description of problem indicators

hose coming from rear of property to lawn, clear fluids discharging intermittent causing rust staining of sidewalk to catch basin

Suspected Violator (name, personal or vehicle description, license plate #, etc.):

Property Owner Nam Rafael Marca

SCTM NO. 67-2-16.17

Address 1118 West Main Stre Riverhead

Investigation Notes

Initial Investigation date 8/18/2010 Investigators Drew Dillingham

____No investigation made	Reason:
____ Referred to different department/agency	Department/Agency:

____Investigated: No action necessary

____Investigated: Requires action		Description of actions:	7/22/2010 ToR NOV (1)
Response:	7/28/2010 owner states its groudnwater from backyard	Follow Up Action (2nd)	7/30/2010 DED met with owner
Response	will reinspect in 2-3 weeks when remedied	Follow up action (3rd)	
Hours between call and invesigation:		Hours to Close incident	

Date case closed:

Notes

High groundwater in back yard area no signs of sanitary waste

Funeral Homes and Crematoriums in the Town of Rivehread						
Company Name	**Street Address**	**Town**	**Telephone No.**	**Owner**	**SCTM No.**	**Distance to Drain Str.**
McLaughlin Heppner Funeral Home	336 Marcy Ave	Riverhead	631-727-3388	Mark Heppner	123-4-23	196' to East - Discharge not likely
Seay Memorial Chapel	711 Harrison Ave.	Riverhead	631-727-2323	Carlton Seay	102-3-31	Adjacent
Tuthill Reginald H Funeral Home	406 E. Main St (SR 25)	Riverhead	631-727-2403	Reginald H Tuthill Funeral H	129-3-10	Adjacent
Alexander Funeral Home	6447 Route 25A	Wading Rvr		Dean Alexander	73-1-1.2	151 to NE

No apparent threat to MS4 System

Adjacent to MS4 structure - High Threat

Golf Courses within the Town of Riverhead						
Company Name	**Street Address**	**Town**	**Telephone No.**	**Proprieter**	**SCTM No.**	**Distance to Drain Str.**
American Golf Corp	1793 Northville Tpke	Riverhead	631-727-4653			
Calveton Links Limited	149 Edwards Ave.,	Calverton	631-369-5200	Robin Gibbs	117-1-5.3	No MS4, 213 south of DEC ID1125
Cherry Creek Golf Links	900 Reeves Ave	Riverhead	631-369-6500			
Friars Head	3000 Sound Ave	Riverhead	631-591-3778			
Olde Vine Golf Club	9 Tyler Dr	Riverhead	631-727-2063			
Sandy Pond Par Three Golf Co	Roanoke Ave.	Rivehread	631-727-0909			
Stone Wall Rest	967 Reeves Ave	Riverhead	631-506-0777			
The Woods at Cherry Creek	967 Reeves Ave	Riverhead	631-208-3510			
Indian Island Golf Course						

No apparent threat to MS4 System

Adjacent to MS4 structure - High Threat

Fuel Distribution Facilities within the Town of Riverhead						
Company Name	**Street Address**	**Town**	**Telephone No.**	**Proprieter**	**SCTM No.**	**Distance to Drain Str.**
Paraco Gasoline Corp	44 Kroemer Ave	Riverhead	631-727-1890			
Synergy Gasoline Corp	1264 W. Main St. (SR 25)	Riverhead	631-727-2626			
AmeriGas Propane	915 W. Main St. (SR 25)	Riverhead	631-727-2424			
Prest O Peconic Incorp	1400 W. Main St (SR 25)	Riverhead	631-727-1516			
Calverton Fuel Oil Inc.	1691 Middle Road	Calverton	631-727-6479	Ed Hodun Jr.	100-3-7	Residential Property
G&C Petroleum	2173 Roanoke Avenue	Riverhead	631-369-5388	George Yakaboski	42-1-27	N/A Residential/Commer
Jarzombek C & R Inc.	2143 Osborne Ave	Baiting Hollow	631-727-4280	Mr. Jarzombek	62-1-16.1	170 south/Residential
Long Island Ice & Fuel	656 W. Main St. (SR 25)		631-727-3010			
Metro Fuel Of Long Island	851 Scott Ave	Calverton	631-208-9000			
Warners Oil Heat	1698 Old Country Road (SR 25)	Riverhead	631-727-2145			Repairs
??Bulk Oil St	446 Edwards Ave	Calverton		Golfo Development Co	117-2-6	1164 NW of DEC ID1305
Peconic Propane	3947 Middle Country Rd. (SR25)	Calverton		Witko Properties Inc.	98-1-17	Adj MS4 & Town Wtlnds

No apparent threat to MS4 System

Adjacent to MS4 structure - High Threat

Junk Yards

Company Name	Street Address	Town	Telephone N	Proprieter	SCTM No.	Distance to Drain Str.
	27 Hubbard Ave	Riverhead		Thomas F. Gallo	131-1-2.2	Adj to MS4 & DEC ID R-3

Auto Repair Shops and Fueling Stations within the Town of Riverhead

Company Name	Street Address	Town	Telephone No.	Proprieter	SCTM No.	Distance to Drain Str.	Pre 1980	Post 1981
East End Marketing	1563 Main Rd	Jamesport		801 F Realty	68-4-65.1	Adjacent		
Emire Oil Station	1356 Old Country Rd	Riverhead	631-369-5900	Argadash Inc	108-2-7	Adjacent		
Luk Oil Fueling Station	1733 Old Country Rd (CR 58)	Riverhead	631-722-8484	Leemilts Petroleum Inc.	119-1-8	Adjacent		
Riverhead Mobil	1575 Old Country Rd	Riverhead	631-727-7234	1260 Old Country Rd Inc.	101-2-12.4	Adjacent		
Enterprises Incorp	415 E. Main St	Riverhead	631-369-5138	Prabha Rani	129-4-17	Adjacent		
Hess Gass Station	870 Old Country Road (CR 58)	Riverhead		Hess Realty Corp	108-3-26	Adjacent		
Hess Gas Station	6305 SR 25A	Wading Rvr		Amerada Hess Corp	75-3-3.2	Adjacent		
????	871 Old Country Road (CR 58)	Riverhead		Trustees	104-1-8.3	Adjacent		
Midas	888 Old Country Road (CR 58)	Riverhead		Trust	108-3-25	Adjacent	x	
Jiffy Lube	997 Old Country Road (CR 58)	Riverhead		Longwood Realty	108-4-11.11	Adjacent	x	
Eagle Auto	58)	Riverhead		Eagle Properties	108-1-10.1	Adjacent	x	
??? SE corner of Osborn &58	1321 Old Country Road (CR 58)	Riverhead		Riverhead Osborne Realty LLC	122-2-1	Adjacent		
Apple Honda	1375 Old Country Road (CR 58)	Riverhead		Irwin Garsten	108-2-8	Adjacent	x	
Riverhead Toyota	1655 Old Country Road (CR 58)	Riverhead		LLC	119-1-11	Adjacent		
Riverhead Auto Mall	1800 Old Country Road (CR 58)	Riverhead		TRW Realty LLC	119-1-5.1	Adj to CB & Surface water		
CB Gas Station & Mini Mart	4129 Middle Country Rd. (SR 25)	Calverton		Inc.	98-1-8	Adj		
Saps Auto Repair	944 East Main Street (SR 25)	Riverhead		Sap Realty Inc	109-2-13	adj to MS4 & DEC ID R-3	x	
Sunuko Gas Station & Mini Mart	4470 Middle Country Rd (SR 25)	Calverton		4470 Calverton Realty LLC	97-1-82	Adj		x
Riverhead Dodge	642 W. Main Street (SR 25)	Riverhead		Riverhead Dodge Inc.	124-3-18	Adjacent	x	
T-Jays Transmissions	1174 E. Main Street	Riverhead	631-369-0011	LLC	109-2-7.1	Adjacent		x
Rt. 25 Jamesport LLC	1427 SR 25	Jamesport	631-722-4315	Jamesport Station LLC	68-4-1	50' to SR 25 CB	x	
Hess Gas Station	2001 Old Country Road (CR 58)	Riverhead		422 Realty Corp	118-3-6	230' to the east		
Auto RV Repair	6166 SR 25	Manorville		Schmidt Garage Holdings LLC	134-1-6	203' to the East	x	
Fueling Station & Mini Mart	2051 WR Mnrvl Road	Wading Rvr		Vohora Realty LLC	74-1-55.1	No close MS4 structure		
Gas Station	1212 East Main St (SR 25)	Riverhead		Nicolos Three LLC	106-1-9.3	156.5' to the North		
Riverhead Ford	1419 Old Country Road (CR 58)	Riverhead		LS Family LP	108-2-17.1		x	
Riverhead Subaru	1521 Old Country Road (CR 58)	Riverhead		Riverhead Pooh LLC	101-2-18.1			x
Co.	109 Sound Ave	Riverhead	631-722-3682					
Riverhead Radiator	1181 E. Main St	Riverhead	631-727-2575					
Sound Avenue Equipment Co.	5152 Sound Ave	Riverhead	631-722-3682					
Calverton Citco	4670 Middle Country Rd.	Calverton	631-591-1698					
Empire Service Station	640 Old Country Rd.	Riverhead	631-369-9240					

Empire Service Station	1050 Osborn Ave	Riverhead	631-369-9602			
Enka Petroleum	1149 Old Country Rd, Ste E4	Riverhead	631-208-9292			
Good Luck Calverton Corp	1 Edwards Ave	Calverton	631-208-0216			
Mei Incorp	1212 E. Main St	Riverhead	631-208-0053			
Schenck Quick Stop	3705 Middle Country Rd	Calverton	631-369-2416			
Superior Gasoline	Main Rd.	Aquebogue	631-722-4837			
Toms Country Automotive	4670 Middle Country Rd.	Calverton	631-369-5507			
Tsaa Management Copr	7 Peconic Trl	Riverhead	631-208-3009			
Incorporated	504 W. Main St.	Riverhead	631-727-7009			
Riverhead Buick Pontiac GMC LLC	1800 A Old Country Rd	Riverhead	631-727-2271			

No apparent threat to MS4 System

Adjacent to MS4 structure - High Threat

Restaurants and Food Prep Facilities in the Town of Riverhead

Delis/Food Prep

Company Name	Street Address	Town	Telephone No.	Proprieter	SCTM No.	Distance to Drain Str.
Aquebogue Mini Mart Incorporated	363/365 Meetinghouse Creek Rd.	Aquebogue	631-722-3971	Larand Co., LLC	86-1-29.1	Site water front 340' to east
Duffy's Deli	1696 Old Cntry Rd (CR 58)	Riverhead	631-727-7271	Warners Oil Heat Inc	101-1-10.4	CB 153 w/o Dwy
Duffy's Deli	1566 Main Rd. (SR 25)	Jamesport	631-722-2150	LMG Properties Inc.	68-2-5	128' to drain on S. Jamesport Ave
Katrinka Deli	1451 Main Road (SR 25)	Jamesport	631-722-3447	Jamesport Plaza LLC	68-4-2	116' to SR 25 CB
Meetinhouse Deli	218 Maid Rd (SR 25)	Aquebogue	631-722-2222	PVA Properties	85-3-79.2	Adjacent to SR 25 CB
Euro Deli	517 Pulaski Street, Unit B	Riverhead	631-727-1635			
Fisherman's Deli	1315 W. Main Street (SR 25)	Riverhead	631-727-4291			
El Caracol Deli	122 Griffing Avenue	Riverhead	631-369-0840			
Railroad Market	159 Railroad Street	Riverhead	631-208-0313			
Schenck Quick Stop	3705 Middle Country Rd (SR 25)	Calverton	631-591-3408			
Bagel Lovers Cave	673 Osborn Ave.	Riverhead	631-727-5080			
CK's Deli Catering Incorp	511 Northvill Tpke	Riverhead	631-727-9094			
Kim's	123 W. Main Street	Riverhead	631-905-9727			
Lobster Roll Deli	3225 Sound Ave, Ste 5	Riverhead	631-369-8774			
Maple Tree Deli Grocery	820 W. Main St (SR 25)	Riverhead	631-727-2819			
Marta's Deli	300 Riverleigh Ave.	Riverhead	631-369-4671			
MG Deli of Riverhead Incorp	999 E. Main Str (SR 25)	Riverhead	631-369-2966			
New Calverton Deli Incorp	3674 Middle Cntry Rd.,	Calverton	631-727-7119			
Polish Town Deli & Seafood Maret	432 Pulaski Str	Riverhead	631-727-3199			
Quick Stop	1172 W. Main Street	Rivehread	631-727-1070			
Riverhead Deli Corp.	55 W. Main Street (SR 25)	Riverhead	631-727-5482			
Riverhead Village Market	945 W. Main Str (SR 25)	Riverhead	631-208-1369			
Speeds Express Deli	800 E. Main Str (SR 25)	Riverhead	631-727-1052			
Village Deli of Riverhead	318 E. Main Str (SR 25)	Riverhead	631-369-7302			
Wisla Delicacy Deli Corp	125 W. Main St (SR 25)	Riverhead	631-369-2102			
Restaurants						
Company Name	**Street Address**	**Town**	**Telephone No.**	**Proprieter**	**SCTM No.**	**Distance to Drain Str.**
Carlo's Pizza Brew Pasta Too	435 Osborne Plaza	Riverhead	631-369-2010			
Sabor Latino Rst	192 Old Country Rd. (CR 58)	Riverhead	631-830-0228	Peconic Plaza LLC	84-4-36.5	adjacent
Antino's Pizzeria of Calverton	4490 Middle Country Rd	Calverton	631-727-5645	Calverton Commons	97-2-30	65' to the East
Domino's Pizza	195 Old Country Rd.	Riverhead	631-369-9090	Peconic Plaza LLC	84-4-36.5	adjacent

Lenny's Pizza & Italian Rest	1451 Main Rd	Jamesport	631-722-8589	Jamesport Plaza LLC	68-4-2	116' To SR 25 CB
Parto's Restaurant	12 West Main St	Riverhead	631-727-4828			
Pizza Hut	999 Old Country Rd.	Riverhead	631-727-3083	Longwood Realty Corp	108-4-11.10	Adjacent
Sergio's Pizzeria	739 Old Country Road,	Riverhead	631-369-1057	Riverhead PGC LLC	104-2-16	self contained
Sbarro Inc.	1490 Old Country Rd	Riverhead	631-369-9614	Tanger Properties LP	119-1-38.1	Adjacent
Applebee's Neighborhood Grill & Bar	1832 Old Country Rd.	Riverhead	631-369-3500	OC Riverhead 58 LLC	119-1-1.1	Adjacent
Buoy One Restaurant	1175 West Main Street	Riverhead	631-208-9737			adjacent
Modern Snack Bar	628 Main Road (SR 25)	Aquebogue	631-722-3655	Wittmeier Family LLP	67-1-27	562' to the west on SR 25
Crystal Garden Chinese Buffet	747 Old Country Road	Riverhead	631-208-0101	Riverhead PGC LLC	104-2-16	self contained
Bean Bagel Café	4426 Middle Country Rd.	Calverton	631-238-5858	Jeanette Dassaro	97-2-32	192' to SE
Boulder Creek	1490 Old Country Rd	Riverhead	631-369-2900	Riverhead Ctr LLC	101-2-11.1	
Burger King Restaurant	900 Old Country Rd	Riverhead	631-727-5553	900 OCR LLC	108-3-23	60' to south
Cliff's Elbow Room	1549 Main Rd	Jamesport	631-722-3664	Saunders Family LP	68-4-62	293' to west SR 25 CB
Cliff's Rendezvous	313 E. Main Street	Riverhead	631-727-5511	Saunders Family LP	129-4-12	158' to the south
Country Rotisserie of Riverhead Inc	1528 Old Country Rd	Riverhead	631-369-4200	Riverhead Center LLC	101-2-11.1	
Friendly's Ice Cream Corp	949 Old Country Road (CR 58)	Riverhead	631-727-5139	Longwood Realty Corp	108-4-11.15	Adjacent
Ground Round	1051 Old Country Rd	Riverhead	631-591-2933	Requerdo Co.	108-4-14.6	Adjacent
J&R's Steak House	4362 Middle Country Rd.	Calverton	631-727-7218	C&C Shorelands Inc.	97-2-36	304' to the East
Jamesport Country Kitchen	1601 Main Road	Jamesport,	631-722-3537	Matt Kar Realty Inc.	69-2-2	230' on S. Jamesport Ave
Jamesport Manor Inn	370 Manor Lane	Jamesport,	631-722-0500	Kar-McVeigh LLC	47-2-3	N/A
Kam Hung Kitchen	1541 Main Rd (SR 25)	Jamesport	631-722-5152	Jamesport Plaza LLC	68-4-2	116' To SR 25 CB
KFC	993 Old Country Rd	Riverhead	631-369-4141	Old Country Rd Rlty LLC	108-4-11.3	Adjacent
Lobster Wok	1073 Old Country Rd	Riverhead	631-369-9230	Requerdo Co.	108-4-14.6	Adjacent
Lolly's Hut	1290 Old Country Rd.	Riverhead	631-369-9230	Plantation Holding Corp	122-1-1	Adjacent
Jerry and the Mermaid	469 E. Main Street	Riverhead	631-727-8489	Peconic RiverBoat Basir	129-4-21.3	197' West
Mc Donald Rest	1770 W. Main St	Rivehread	631-369-1331	Howard Hogan - Tanger	118-3-4	Adj to MS4 & Surface Water
Mc Donald Rest	6333 SR 25A	Wading Rvr		River Triangle LLC	73-1-1.2	Adjacent
Meetinghouse Creek Inn	177 Meeting House Creek Rd.	Aquebogue	631-722-4220	Lighthouse Yacht Club L	86-2-17.2	adj to surface water; Str 565' sth
Peconic Bay Diner	871 Old Country Road (CR 58)	Riverhead	631-369-7758	Pericles Bakas Trustees	104-1-8.3	Adjacent
Taco Bell	1220 Old Country Rd.	Riverhead	631-727-4068	LB Diamond & Sons LLC	102-3-1.1	Adjacent
TGIF`	1480 Old Country Rd	Riverhead	631-506-0240	Riverhead Ctr LLC	101-2-11.1	
Tweeds Buffalo Bar	17 E Main St	Riverhead	631-208-3151	Peaches Unlimited	128-6-69	49' to the East
Wendy's	1165 Old Country Rd	Riverhead	631-369-3231	Wendy's Old Fashioned	108-4-5.1	60' North
Wok & Roll	1770 W. Main St	Riverhead	631-727-1930	Howard Hogan - Tanger	118-3-4	Adj to MS4 & Surface Water
Vinyard Cater's	978 Main Road (SR 25)	Aquebogue		Anthippi Inc.	67-3-24.6	Adj to SR 25 CB and on site wtlds
Panera	11 Commerce Avenue	Riverhead		Paul Martin LLC	101-1-10.5	Adjacent
Digger O'Dell's	72 W. Main Street	Riverhead	631-369-3200	Cheri Wirth	128-6-17	157' to East

Hy Ting Restaurant	54 W. Main Street	Riverhead	631-727-1557	Young Loo	128-6-19.1	Adjacent
Riverhead Grill	75 E. Main St	Riverhead	631-727-8435	Riverhead Enterprises L	128-6-77	N/A
Spicy's BBQ	225 W. Main Street	Riverhead	631-727-2781	James Capkanis	128-3-56	56' to the north
Farm Country Country	513 W. Main Street	Riverhead		Maria Carson	124-4-33	Adjacent to Peconic
Roadhouse Brickoven Pizza	1111 W. Main Str	Riverhead	631-208-9888			
Athens Gyro and Grill	33 E. Main St	Riverhead	631-727-1301			
Haiku	40 E. Main Street	Riverhead	631-727-7778			
Stonewalls Rest	967 Reeve's Ave	Riverhead	631-506-0777			
The Birchwood	512 Pulaski St	Riverhead	631-727-4449			
Casa Rica Rest & Sports Bar	65 E. Main Street	Riverhead	631-727-7909			
Clubhouse at Indian Island	661 Riverside Drive, Unit B	Riverhead	631-727-0788			
Comtesse Theresa Bistro	739 E. Main Street	Riverhead	631-779-2800			
The Cooperage Inn	2218 Sound Ave	Baiting Hollow	631-727-8994			
Cork & Ivy Café	58 W. Main Street	Riverhead	631-369-5323			
Dark Horse Restaurant	1 E. Main Street	Riverhead	631-208-0072			
Everbody's Hero	1104 Old Country Road	Riverhead	631-369-2850			
Funchos Fajita Grill	1156 W. Main St	Riverhead	631-369-7277			
Giorgio's Caterers	100 Fox Hill Dr.	Baiting Hollow	631-727-6076			
Great Steak & Potato	1170 W. Main St.	Riverhead	631-727-6357			
Jedehiah Hawkins Inn	400 S. Jamesport Ave	Riverhead	631-722-2900			
Julia's Pizzeria Rest	29 E. Main St	Riverhead	631-369-8332			
Lucky' House Rest	717 E. Main St	Rivehread	631-727-4881			
Michaels Rest	65 E. Main Street	Riverhead	631-727-0646			
Subway	1093 Rt. 58	Riverhead	631-727-3005			
Taqueria Mesico	709 E. Main Street	Riverhead	631-208-2902			

No apparent threat to MS4 System
Adjacent to MS4 structure - High Threat
Within Impaired Watershed

APPENDIX G

POST CONSTRUCTION MANAGEMENT PLAN

Minimum Control Measure 5 - Post Construction Stormwater Management

Concept

1	Measurement	Meetings with HOA's and Mobile Home parks on Stormwater Management
	Evaluation	
2	Measurement	Perform full cleaning of a minimum of two recharge basins/year. Establish flooding database for the newly cleaned basins
	Evaluation	Has flooding reduced in this area.
3	Measurement	Track flooding areas and determine BMP to reduce future potential
	Evaluation	Implement and add to database in Concept 2 for tracking
4	Measurement	Reduce directly connected impervious surfaces in new developments and redevelopment projects by requireing that grassed swales or filter strips be installed along roadsides in lieu of curbs and gutters
	Evaluation	reduce stormwater runoff by 30

BMP Summary Sheet	
MS4 Name:	Town of Riverhead
Minimum Control Measure:	POST CONSTRUCTION STORMWATE RMANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT
BMP Identification Number	
BMP Title	Development and Implementaion of Structural and/or Non-structural BMPs

Permit Description

You must also select and implement a program of appropriate BMPs and measurable goals for MCM consisting of, at a minimum: Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for your community.

BMP Description

The Town will consider structural (such as wet detention ponds and constructed wetlands) and non-structural (such as grassy swales) stormwater management techniques for managing post-construction stormwater runoff. Construciton of stormwater detention to protect receiving waters such as lakes, wetlands, ponds and creeks will be incorporated within development and redevelopment sites. Guidelines for Integrated Management Practices (IMPs) will be used where practical. BMPs for neighborhood roadway reconstruction projects will be incorporated as needed or as practical.

Locations in SWMP for detailed information relating to this BMP:

Measurable Goals		2012	2013	2014	2015
1	Evaluate design guidelines annually				
2	Investigate new post construction BMP techniques as available or as needed				
3	Include inspection of stormwater management BMPs in the review guidelines for site				
4	Require Developers to inspect BMPs as part of the Site Plan Review/Building Permits				

Timeline/Implementation and Notes:

Review BMP Strategies for Post-construction as needed

Specific Components and Notes:

1 Stormwater detention construction requirements
2 Requirement for consideration of infiltration practices (such as rain gardens, grassy swales, bioretention or filter strips) as practical
3 Local Drainage Plan Update
4 Open Space Protection

Responsible Party for this BMP:	
Department:	
Name:	
Phone:	
E-mail:	

APPENDIX H

STORMWATER POLLUTION PREVENTION PLANS

Municipal Garage – 1412 Old Country Road, Riverhead
Highway Facility – 1177 Osborne Ave., Riverhead
Town Hall West – 1295 Pulaski St., Riverhead

TOWN OF RIVERHEAD

MUNICIPAL GARAGE

STORMWATER POLLUTION PREVENTION PLAN

JANUARY 2011
Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200 Ext. 201

Stormwater Pollution Prevention Plan
for:

Town of Riverhead Municipal Garage
1412 Old Country Road/County Route 58
Riverhead, New York 11901
SCTM NO. 0600-108-2-2
(631) 727-3200 x 381

SWPPP Contact(s):

Town of Riverhead
John Reeve

Riverhead, New York 11901
(631) 727-3200 x 391

SWPPP Preparation Date:

1/7/11

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Attachment A – General Location Map
Attachment B – Site Map
Attachment C - Facility Inspection Checklist
Attachment D - Annual Comprehensive Site Compliance Evaluation

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Municipal Garage
Street: 1412 Old Country Road/County Route 58
City: Riverhead State: NY ZIP Code: 11901
County or Similar Subdivision: Suffolk County

Latitude: 40.927º N Longitude: 72.688º

Method for determining latitude/longitude: EPA Web site

Is the facility located in Indian Country? ☐ Yes X No

Is this facility considered a Federal Facility? ☐ Yes X No
Estimated area of industrial activity at site exposed to stormwater: 2.6 (acres)

Discharge Information

Does this facility discharge stormwater into an MS4? ☐ Yes X No
If yes, name of MS4 operator: _____
Name(s) of water(s) that receive stormwater from your facility NYSDEC Fresh Water Wetland R-30 and unnamed pond
Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes X No
If Yes, identify name of the impaired water (and segment, if applicable):
Identify the pollutant(s) causing the impairment:
For pollutants identified, which do you have reason to believe will be present in your discharge?

For pollutants identified, which have a completed TMDL?
Do you discharge into a receiving water designated as a Tier 2 (or Tier 2.5) water? ☐ Yes X No
Are any of your stormwater discharges subject to effluent guidelines? ☐ Yes X No
If Yes, which guidelines apply?
Primary SIC Code or 2-letter Activity Code: 7538

Identify your applicable sector and subsector: AE

A map of the facility's general location is included in Attachment A as Figure 1.

1.2 Contact Information/Responsible Parties

Facility Operator (s):
Name: Town of Riverhead Municipal Garage, Richie Warner
Address: 1412 Old Country Road/County Route 58
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 727-3200 x 391
Email address: warner@riverheadli.com
Fax number: (631) 369-3652

Facility Owner (s):
Name: Town of Riverhead, John Reeve
Address: 200 Howell Avenue
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 727-3200 x 391
Email address: reeve@riverheadli.com
Fax number: (631) 208-1726

SWPPP Contact:
Name: Richie Warner
Telephone number: (631) 727-3200 x 381
Email address: warner@riverheadli.com
Fax number: (631) 369-3652

1.3 SWPPP Team

Staff Names	Individual Responsibilities
James Wooten	As liaison to the Town Board for Riverhead's MS4 program, Mr. Wooten appropriates the funding necessary to implement and maintain pollution prevention measures required by the SWPPP. Mr. Wooten informs the Town Board of any changes to facility operations that would cause modification to the SWPPP.
John Reeve	Mr. Reeve defines an appropriate set of goals for the SWPPP and monitors overall implementation of the plan.
Richie Warner	Mr. Warner implements SWPPP requirements in conjunction with daily facility operations. He also reviews any changes in facility operations and determines whether modifications are needed to the SWPPP.

1.4 Activities at the Facility

The following activities are conducted at the municipal garage:

- Fueling of town vehicles.
- Washing of town vehicles and equipment.

- Service and repair of town vehicles and equipment.
- Operation of the town impound yard.

A copy of the facility site map is included in Attachment B as Figure 2.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Fueling	Diesel or gasoline
Vehicle impoundment	Leaking diesel, gasoline, antifreeze, motor oil, battery acid, brake fluid, transmission fluid or hydraulic fluid
Filling or emptying petroleum storage tanks	Gasoline, diesel, or used motor oil
Material transportation through Highway Dept access road on west side of Municipal Garage	Salt and soils

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Fuel dispensers	NYSDEC Wetland R-30 and unnamed pond west of paved parking area (sheet flow).
Vehicle impoundment	NYSDEC Wetland R-30 (man-made gully and sheet flow).
Petroleum storage tanks - Gasoline (south end of building), diesel (one at north end and one at south end), or used motor oil (north end of building) tanks	NYSDEC Wetland R-30 and unnamed pond west of paved parking area (sheet flow).

Description of Past Spills/Leaks
No spills or leaks have occurred at the garage during the past three years.

2.3 Non-Stormwater Discharges Documentation

- Date of evaluation: July 1 and 2, 2010.
- Description of the evaluation criteria used: Visual inspection.
- List of the outfalls or onsite drainage points that were directly observed during the evaluation: Three main drainage points were observed. Runoff discharges via sheet flow from part of the dispenser area and from the municipal garage parking area to the unnamed pond west of the parking area. The other two drainage points are located on the east side of the garage building and discharge to NYSDEC wetland R-30. Runoff from the impound area is concentrated and discharged to the NYSDEC wetland through a

manmade gravel-lined swale. Runoff from part of the dispenser area discharges by sheet flow to R-30.

- Different types of non-stormwater discharge(s) and source locations: Discharges to the unnamed pond located originate from the municipal garage parking area. These non-stormwater discharges are comprised of vehicular wash water.
- Action(s) taken, to eliminate unauthorized discharges: On-site washing of vehicles and construction equipment have ceased. Future plans consist of washing Highway Department vehicles and construction equipment at the Scavenger Waste Plant where wash water would be collected and treated. The Scavenger Waste Plant is located at the Town's Wastewater Treatment Facility.

SECTION 3: STORMWATER CONTROL MEASURES

3.1 Good Housekeeping

The municipal garage maintains a clean, orderly work environment in that materials and equipment are neat and well-kept to prevent releases to the environment. Operations are actively maintained in a clean and environmentally friendly manner. Efforts are undertaken to collect, recycle and/or dispose of all excess used materials.

The municipal garage utilizes a three-step process to implement Good Housekeeping measures:

1. Identifying and designating a storage area for every material and every piece of equipment at the garage.
2. Establishing procedures which require that materials and equipment be placed in or returned to designated areas.
3. Establishing a schedule to check for releases and ensure that any releases are being mitigated.

The Town is currently planning for vehicles and construction equipment to be washed at the Scavenger Waste Plant, located at the Wastewater Treatment Facility, where washwater will be collected and treated.

3.2 Maintenance

Preventative maintenance (PM) includes the periodic inspection, maintenance, and testing of targeted facility equipment and systems. These measures are conducted to reveal conditions which could cause breakdowns or failures and result in the discharge of significant materials into storm water.

Tasks performed for general preventative maintenance are as follows:

- When attaching information to equipment and structures, use bold and bright colors consistent with the approach described for good housekeeping.
- Consider and discuss additional procedures beyond those normally recommended by the manufacturer.
- Coordinate scheduling of activities with facility or unit downtime.
- Track duration of materials storage to support an evaluation of container integrity.

- Stormwater leaching pools and inlet piping are inspected and maintained annually. Any additional stormwater structures that require installation as a result of this plan will also be inspected and maintained on this schedule.

In addition, mechanical equipment is inspected on a regular basis. The major elements of the inspection program include monitoring for:

- Cracks or structural failures
- Parts or pieces of equipment not functioning properly
- Degradation or deterioration of equipment
- Equipment in need of cleaning or emptying
- Visual staining in proximity to equipment/vehicles
- Potential releases of any toxic or hazardous materials such as fuel or hydraulic fluid

3.3 Materials Compatibility

Material Safety Data Sheets (MSDS) shall be maintained for each product that is stored or handled at the facility. A three year history shall be maintained for each product detailing any significant leaks or spills, the date, volume, cause and description of the spill, corrective action taken and measures taken to prevent future spills. All storage tanks, containers and associated equipment are designed to be compatible with the respective material stored or handled. All materials, which may be incompatible with other material, are separated and stored in different locations to prevent their coming in contact with each other. Proper labels and signs are used as required.

3.4 Security

A security plan describes the system installed to prevent accidental or intentional entry to a facility that might result in vandalism, theft, sabotage, or other improper or illegal use of the facility. All chemical and petroleum products shall be stored in controlled access areas. Valves shall be locked to prevent unauthorized discharges from the secondary containment structures, tanks and hoses. The Municipal Garage is a fenced and gated facility preventing unauthorized use during off hours.

3.5 Spill Prevention and Response

In the event of a spill, a prompt response is the best means of minimizing any impact to the environment and, in particular, preventing a discharge from reaching the waters of New York State. The operator or employee first becoming aware of a petroleum product spill will assume the role of temporary spill coordinator until he/she can notify the facility's primary spill coordinator. If the temporary spill coordinator is unable to notify the primary spill coordinator or a backup spill coordinator, then he/she will assume the responsibility of implementing an emergency spill response procedure. All employees who could possibly be in the position of having to assume the role of a temporary spill coordinator will be trained in the appropriate health and safety procedures and the implementation of emergency spill response procedures. If they cannot notify the primary spill coordinator or a backup spill coordinator, he or she will be trained in contacting a spill response contractor.

The following agencies shall be notified in the event of a spill include:

Town of Riverhead Police Department	911
Fire Marshall Office	631-727-3200-209
Water Department	631-727-3200-234
Engineering Department	631-727-3200-201
New York State Department of Environmental Conservation Spills Response Hotline	1-800-457-7362

The municipal garage will implement an emergency spill response for any spill, leak, or release of any petroleum product that could reasonably discharge into waters of the State. Emergency spill procedures will include planning, spill assessment, response, containment/source elimination, cleanup and documentation. Incident reporting shall include, at a minimum:

- Names of employees involved
- Date
- Time
- Location
- Response action
- Quantities of materials spilled
- Quantities of cleanup waste generated
- Outside contractors used
- NYSDEC notification
- NYSDEC spill number
- Date of waste disposal
- Waste disposal manifests

3.6 Erosion and Sediment Controls

The gully located on the east side of the site will be filled to surrounding grade with earth, compacted, smoothed and stabilized with an erosion control blanket and grass seed. The drainage area for the gully is substantial. Therefore, a sediment forebay will be installed prior to the existing location of the gully to remove sediment from stormwater runoff before it reaches to the wetland. In addition, a perimeter dike/swale will be installed along the eastern perimeter of the impound yard to reduce both the volume and velocity of stormwater runoff to NYSDEC Wetland R-30. A slotted pipe system connected to two new dry wells is proposed for the length of the paved area adjacent to the unnamed pond on the west side of the municipal garage building. This system will reduce both the volume and velocity of stormwater runoff from the building and paved area.

3.7 Management of Runoff

Existing leaching pools are located on both sides of the building and collect stormwater runoff from the roof. In addition, the same controls to be installed for erosion control will also serve to manage stormwater runoff.

3.8 Employee Training

Employee training is applicable to all levels of responsibility. Components of the SWPPP include jurisdiction levels, beneficial effects, potential consequences and levels of responsibilities of the plan. Municipal garage employees are also trained on sediment and erosion control, good housekeeping, OSHA issues and spill prevention and response.

New employees will receive SWPPP training prior to commencement of activities. Annual refresher training will be provided to all employees.

3.9 Non-Stormwater Discharges

Vehicle and construction equipment washing was formerly conducted in the paved area west of the municipal garage building. This activity has since been terminated. The Town is in the planning stages of coordinating vehicle and construction equipment washing at the Scavenger Waste Plant located at the Town's Wastewater Treatment Facility. Wash water will be collected and treated at the scavenger plant.

SECTION 4: INSPECTIONS

Routine inspections of the equipment and facilities will be conducted weekly. A visual assessment which captures snowmelt discharge will be conducted annually. Inspection reports will be prepared and maintained on site. Records will be maintained for a minimum of three (3) years.

Fleet maintenance is an important component of the SWPPP. Vehicles from the Highway, Police, Building and Grounds and Street Lighting Departments, as well as from the Municipal Garage are kept in good operating condition. Maintenance records are maintained to current date on all vehicles in terms of servicing requirements and inspections.

The overall program effectiveness will be evaluated with subsequent recommendations issued and plan amendments implemented. All revisions, changes, or management activities identified during the evaluation will be completed within 12 weeks of the evaluation. Once the evaluation has been completed, a summary report will be prepared. The report will contain:

- The scope of the evaluation;
- Personnel performing the evaluation;
- The date(s) of the evaluation; and
- Actions to be taken as a result of the evaluation

The report will identify any incidents of noncompliance or certify that the facility is in compliance with the SWPPP. The report will be signed by the appropriate SWPPP representative and kept on file with the plan.

A copy of the weekly Facility Inspection Checklist is included in Attachment C and a copy of the Annual Compliance Evaluation Report form is located in Attachment D.

SECTION 5: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator Name: John Reeve Owner/Operator Title: Sanitation Superintendant

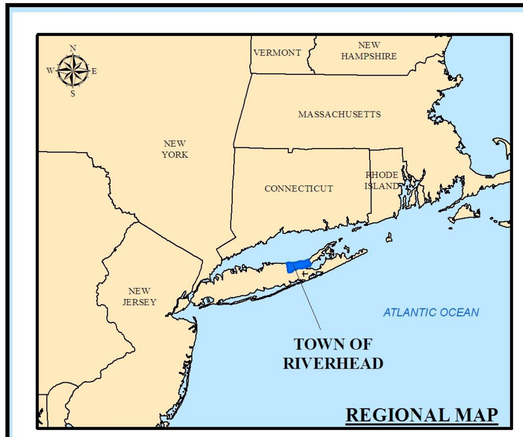
Owner/Operator Signature: _____ Date: _____

SECTION 6: SWPPP MODIFICATIONS

SWPPP Amendment Log

Amend. No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

ATTACHMENT A



LONG ISLAND SOUND

Jamesport State Park

NORTHVILLE

Main Rd

JAMESPORT

BAITING HOLLOW

Wildwood State Park

WADING RIVER

AQUEBOGUE

Route 25A

SITE

Calverton National Cemetery

State Hwy 25

Middle Country Rd

RIVERHEAD

Main St

FLANDERS BAY

W Main St

Nugent Dr

Enterprise Park at Calverton (EPCAL)

CALVERTON

Rail Access

Edwards Ave

Flanders Rd

Middle Country Rd

Suffolk County Court

Riverhead-Hampton Bays Rd

I-495

State Hwy 27

0 0.25 0.5 1 Miles

Municipal Garage

TOWN OF RIVERHEAD

Suffolk County
State of New York

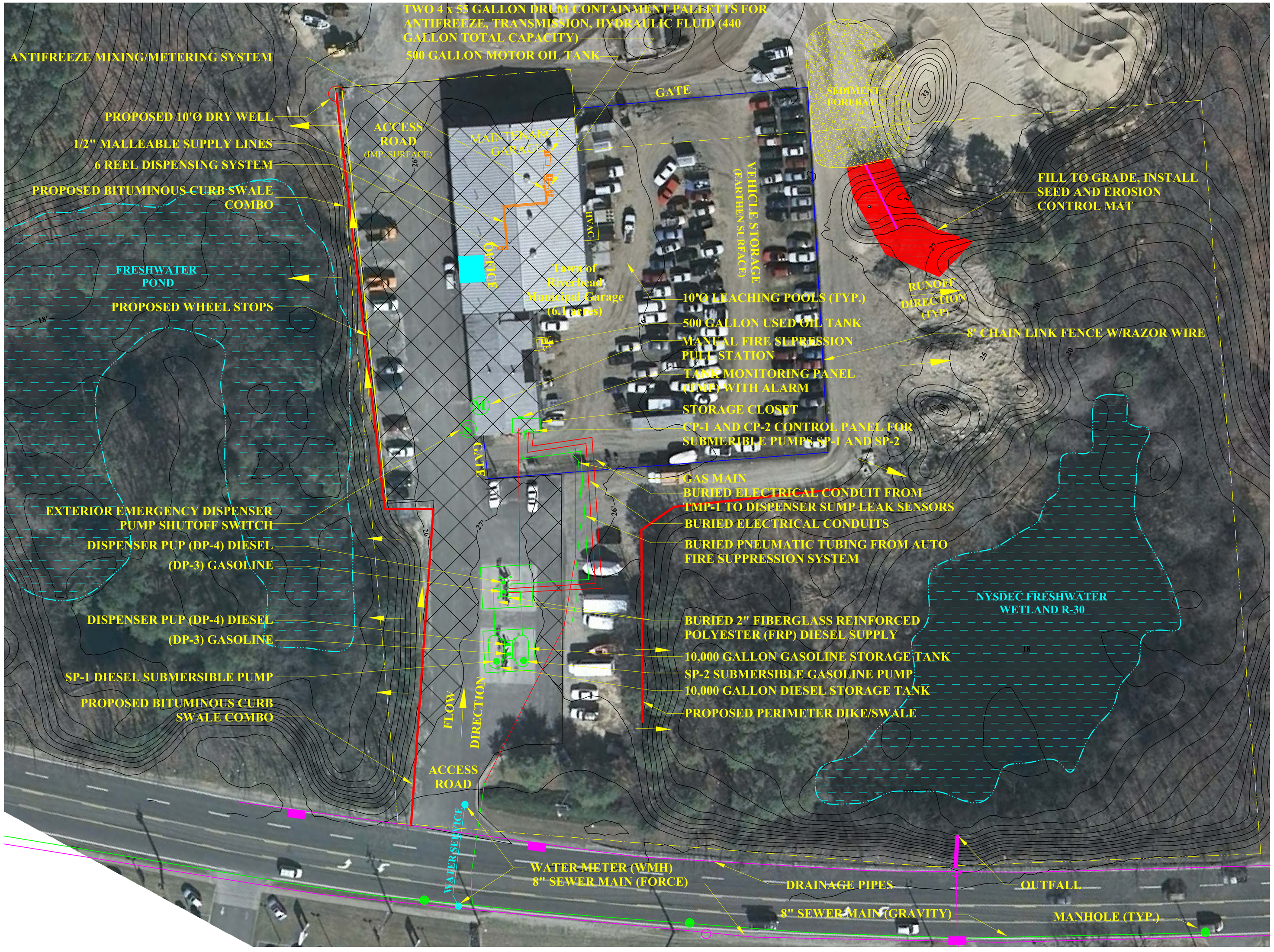
LEGEND

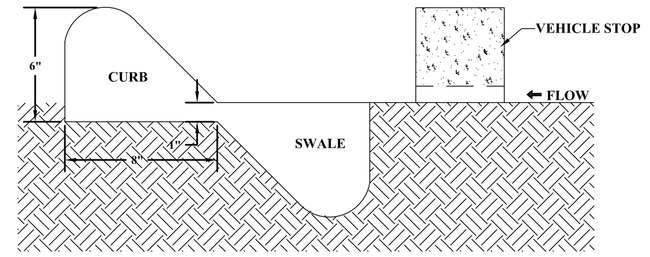
- Town Roads
- County Roads
- Interstate/State Roads
- Railroad
- Town Boundary

General Location Map

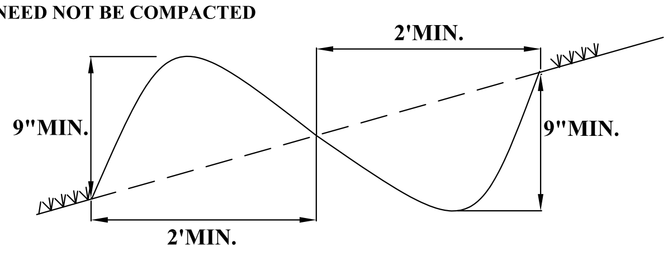
Figure 1

ATTACHMENT B





BITUMINOUS CURB/SWALE DETAIL
not to scale



PROPOSED PERIMETER DIKE/SWALE DETAIL
not to scale

ON SITE WASHING OF VEHICLES AND CONSTRUCTION EQUIPMENT HAS CEASED. TOWN VEHICLES AND CONSTRUCTION EQUIPMENT WILL BE WASHED AT THE SCAVENGER WASTE PLANT WHERE WASH WATER WILL BE COLLECTED AND TREATED. THE SCAVENGER WASTE PLANT IS LOCATED AT THE TOWN'S WASTE WATER TREATMENT FACILITY.

TOWN OF RIVERHEAD
200 HOWELL AVENUE
RIVERHEAD NEW YORK 11901

NO.	DATE	DESCRIPTION
1	3/14/2011	UPDATES DUE TO PROPOSED OPERATIONS CHANGES

TOWN OF RIVERHEAD DEPARTMENT OF SANITATION

STORM WATER POLLUTION PREVENTION PLAN

DATE: JANUARY 2011

DRAWN BY: TH/DD/RH

SCALE: 1:30 (30 15 0 15 30)

Site Map
Figure 2

ATTACHMENT C

Weekly Inspection Checklist

Facility Name:_____

Date:_____

Time Inspection Began:_____ Time Inspection Ended:_____

Weather Conditions_____

Inspectors Name:_____

General

Comments:_____

_____

_____

_____

General Site Conditions

	Problem	
	Yes	No
Roadways, access ramps, loading-unloading (evidence of spills, leaks, odors or unauthorized discharge)		
Structural Controls		
Tanks and Containers		
Drainage Areas:		
Obstructions		
Evidence of erosion		
Presence of windblown debris		
Ponding of water		

ATTACHMENT D

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION FORM

I. Date of Evaluation: _____

II. Personnel Performing Evaluation: _____

_____

_____

III. Scope of Evaluation

The annual compliance evaluation included a review of the site's storm water pollution prevention plan as well as the on-site management practices and structural controls. The plan was reviewed to verify the permit requirements for such items as personnel training, inspections and sampling procedures had been met in the previous year. A review of the site was performed to identify if any evidence, or the potential of contamination was present. In addition, the following questions were addressed during the evaluation.

- Are there any new or previously unidentified areas not included in the plan?
- Are there any new or previously unidentified pollutants not included in the plan?
- Are the current measures to reduce pollutants adequate?
- Are the structural devices and controls operating correctly?
- Are the structural devices and controls implemented as described in the plan?
- Are additional devices or controls needed?

Incidents of non-compliance identified in the evaluation must be addressed in this report.

IV. Actions to be Undertaken

Are actions to be taken or revisions to the stonn water plan required? Yes No

If yes, describe: _

_____

_____

_____

If plan revisions are necessary, they must be completed within 2 weeks of this evaluation. Modifications to the storm water plan or implementation of non-structural measures or controls must be completed within 12 weeks of the evaluation. Changes which require construction of structural measures or controls must be completed within 3 years of the evaluation.

V. Certification

I hereby certify that I have evaluated the storm water program of the Riverhead Municipal Garage and determined that the site is in compliance with both the current storm water permit and storm water pollution prevention plan.

Signature: _____

Title: Superintendent, Municipal Garage

Date: _____

* Retain a copy of this report in the plan for at least 3 years.

TOWN OF RIVERHEAD

HIGHWAY DEPARTMENT

STORMWATER POLLUTION PREVENTION PLAN

January 7, 2011
Revision 1 – March 14, 2011
Revision 2 – April 3, 2012

Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200, Ext. 201

Stormwater Pollution Prevention Plan
for:

Town of Riverhead Highway Department
1177 Osborn Avenue
Riverhead, New York 11901
SCTM NO. 0600-108-2-1
(631) 727-3200, Extension 228

SWPPP Contact(s):

Town of Riverhead
George Woodson
1177 Osborn Avenue
Riverhead, New York 11901
(631) 727-3200, Extension 228

SWPPP Preparation Date:

1/7/2011
Revision 1 – 3/14/11
Revision 2 – 4/3/12

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Attachment A – General Location Map
Attachment B – Site Map
Attachment C - Facility Inspection Checklist
Attachment D - Annual Comprehensive Site Compliance Evaluation

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Highway Department
Street: 1177 Osborn Avenue
City: Riverhead State: NY ZIP Code: 11901
County or Similar Subdivision: Suffolk County

Latitude: 40.929º N Longitude: 72.689º

Method for determining latitude/longitude: New York State Department of Conservation (NYSDEC) Stormwater Interactive Map
Is the facility located in Indian Country? ☐ Yes X No

Is this facility considered a Federal Facility? ☐ Yes X No
Estimated area of industrial activity at site exposed to stormwater: 7.4 (acres)

Discharge Information

Does this facility discharge stormwater into an MS4? ☐ Yes X No
If yes, name of MS4 operator: _____
Name(s) of water(s) that receive stormwater from your facility NYSDEC Fresh Water Wetland R-30 and unnamed pond
Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes X No
If Yes, identify name of the impaired water (and segment, if applicable):
Identify the pollutant(s) causing the impairment:
For pollutants identified, which do you have reason to believe will be present in your discharge?
For pollutants identified, which have a completed TMDL?
Do you discharge into a receiving water designated as a Tier 2 (or Tier 2.5) water? ☐ Yes X No
Are any of your stormwater discharges subject to effluent guidelines? ☐ Yes X No
If Yes, which guidelines apply?
Primary SIC Code or 2-letter Activity Code:

Identify your applicable sector and subsector: AE

A map of the facility's general location is included in Attachment A as Figure 1.

1.2 Contact Information/Responsible Parties

Facility Operator (s):
Name: Town of Riverhead Highway Department, George Woodson
Address: 1177 Osborn Avenue
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 727-3200, Extension 228
Email address: woodson@riverheadli.com
Fax number: (631) 727-0674

Facility Owner (s):
Name: Town of Riverhead, George Woodson
Address: 1177 Osborn Avenue
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 727-3200, Extension 228
Email address: woodson@riverheadli.com
Fax number: (631) 727-0674

SWPPP Contact:
Name: George Woodson
Telephone number: (631) 727-3200, Extension 228
Email address: woodson@riverheadli.com
Fax number: (631) 727-0674

1.3 SWPPP Team

Staff Names	Individual Responsibilities
James Wooten	As liaison to the Town Board for Riverhead's MS4 program, Mr. Wooten appropriates the funding necessary to implement and maintain pollution prevention measures required by the SWPPP. Mr. Wooten informs the Town Board of any changes to facility operations that would cause modification to the SWPPP.
George Woodson	Mr. Woodson defines goals for the SWPPP, implements SWPPP requirements in conjunction with daily facility operations, monitors overall implementation of the plan, and reviews any changes in facility operations and determines whether modifications are needed to the SWPPP.

1.4 Activities at the Facility

The following activities are conducted at the Highway Department:

- Salt storage for roadway deicing.

- Staging and mixing of sand and salt for application to roadways when ice accumulates.
- Grading fill which is used as road bed material.
- Staging area to mix sand and salt which is applied to roadways when ice accumulates.
- Indoor storage of construction equipment in bays located beside the office building.
- Outdoor storage of construction equipment.
- Conducting administrative activities within an on-site office building for operation of the Highway Department.
- Construction equipment includes but is not limited to: pickup trucks, vacuum trucks, cranes, back hoes, bull dozers, pavers, street sweepers, vibratory rollers, dump trucks and trailers.
- Storage of waste oil within a 55-gallon drum from equipment such as chain saws, etc. The waste oil is recycled as chain lubricant for the snow plow sanders.
- Stockpiling construction materials such as large aggregate and sand mixes for use throughout the year.

The Municipal Garage is located in close proximity to the Highway Department. If a truck requires maintenance service it is automatically transported to the Municipal Garage.

A copy of the facility site map is included in Attachment B as Figure 2.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Storage and mixing of salt	Sodium chloride and calcium chloride
Storage of construction equipment	Leaking diesel, gasoline, antifreeze, motor oil, battery acid, brake fluid, transmission fluid or hydraulic fluid
Emptying waste oil from chain saws, etc. and lubricating snow plow sander chains	Used motor oil
Lubricating equipment	Grease

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Salt and sand mixing area	NYSDEC Wetland R-30 (sheet flow).
Outdoor construction equipment storage	NYSDEC Wetland R-30 (sheet flow).
Outdoor equipment lubrication	NYSDEC Wetland R-30 (sheet flow).

Description of Past Spills/Leaks
No spills or leaks have occurred at the Highway Department during the past three years.

2.3 Non-Stormwater Discharges Documentation

- Date of evaluation: August 25, 2010.
- Description of the evaluation criteria used: Visual inspection.
- Two onsite drainage points were observed during the evaluation. Runoff discharges via sheet flow from the west side of the side of the Highway Yard south to the Municipal Garage parking area, and subsequently to the unnamed pond west of the parking area. The other drainage point is located on the east side of the Highway Yard and discharges to NYSDEC wetland R-30 through a pipe located on the Municipal Garage parcel. Stormwater flows through the pipe to a manmade gravel-lined swale and subsequently to the wetland.
- Different types of non-stormwater discharge(s) and source locations: None.
- Action(s) taken, to eliminate unauthorized discharges: On-site washing of vehicles and construction equipment have ceased. Future plans consist of washing Town vehicles and construction equipment at a proposed wash rack to be located at the just in front (south) of the repair bays at the Highway Yard garage (Figure 2). The wash rack will be equipped with a holding tank for the wash water. When necessary, the Sanitation Department will collect the wash water and transport it to the Scavenger Waste Plant for treatment. The Scavenger Waste Plant is located at the Town's Wastewater Treatment Facility.

SECTION 3: STORMWATER CONTROL MEASURES

3.1 Good Housekeeping

The Highway Department maintains a clean, orderly work environment in that materials and equipment are neat and well-kept to prevent releases to the environment. Operations are actively maintained in a clean and environmentally friendly manner. Efforts are undertaken to collect, recycle and/or dispose of all excess used materials.

The Highway Department utilizes a three-step process to implement Good Housekeeping measures:

1. Identifying and designating a storage area for every material and every piece of equipment at the highway yard.
2. Establishing procedures which require that materials and equipment be placed in or returned to designated areas.
3. Establishing a schedule to check for releases and ensure that any releases are being mitigated.

The Town is currently planning for Town vehicles and construction equipment to be washed in a paved area at the Highway Yard (see above and Figure 2). Wash water will be collected in a drain with a holding tank, removed by the Sanitation Department and transported for treatment to the Scavenger Waste Plant.

3.2 Maintenance

Preventative maintenance (PM) includes the periodic inspection, maintenance, and testing of targeted facility equipment and systems. These measures are conducted to reveal conditions which could cause breakdowns or failures and result in the discharge of significant materials into storm water.

Tasks performed for general preventative maintenance are as follows:

- When attaching information to equipment and structures, use bold and bright colors consistent with the approach described for good housekeeping.
- Consider and discuss additional procedures beyond those normally recommended by the manufacturer.
- Coordinate scheduling of activities with facility or unit downtime.
- Track duration of materials storage to support an evaluation of container integrity.
- Sweeping will be conducted outside of the south salt barn upon completion of each mixing operation but at least daily.

In addition, mechanical equipment is inspected on a regular basis. The major elements of the inspection program include monitoring for:

- Cracks or structural failures
- Parts or pieces of equipment not functioning properly
- Degradation or deterioration of equipment
- Equipment in need of cleaning or emptying
- Visual staining in proximity to equipment/vehicles
- Potential releases of any toxic or hazardous materials such as fuel or hydraulic fluid

3.3 Materials Compatibility

Material Safety Data Sheets (MSDS) shall be maintained for each product that is stored or handled at the facility. A three year history shall be maintained for each product detailing any significant leaks or spills, the date, volume, cause and description of the spill, corrective action taken and measures taken to prevent future spills. All storage tanks, containers and associated equipment are designed to be compatible with the respective material stored or handled. All materials, which may be incompatible with other material, are kept separated and stored in different locations to prevent their coming in contact with each other. Proper labels and signs are used as required.

3.4 Security

A security plan describes the system installed to prevent accidental or intentional entry to a facility that might result in vandalism, theft, sabotage, or other improper or illegal use of the facility. The Highway facility has active burglar and fire alarm systems. All chemical and petroleum products shall be stored in controlled access areas. Valves shall be locked to prevent unauthorized discharges from the secondary containment structures, tanks and hoses. The Riverhead Highway Department is a fenced and gated facility preventing unauthorized use during off hours.

3.5 Spill Prevention and Response

In the event of a spill, a prompt response is the best means of minimizing any impact to the environment and, in particular, preventing a discharge from reaching the waters of New York State. The operator or employee first becoming aware of a petroleum product spill will assume the role of temporary spill coordinator until he/she can notify the facility's primary spill coordinator. If the temporary spill coordinator is unable to notify the primary spill coordinator or a backup spill coordinator, then he/she will assume the responsibility of implementing an emergency spill response procedure. All employees who could possibly be in the position of having to assume the role of a temporary spill coordinator will be trained in the appropriate health and safety procedures and the implementation of emergency spill response procedures. If they cannot notify the primary spill coordinator or a backup spill coordinator, he or she will be trained in contacting a spill response contractor.

The following agencies shall be notified in the event of a spill include:

Town of Riverhead Police Department	911
Fire Marshall Office	631-727-3200-209
Water Department	631-727-3200-234
Engineering Department	631-727-3200-201
New York State Department of Environmental Conservation Spills Response Hotline	1-800-457-7362

The Highway Department will implement an emergency spill response for any spill, leak, or release of any petroleum product that could reasonably discharge into waters of the State. Emergency spill procedures will include planning, spill assessment, response, containment/source elimination, cleanup and documentation. Incident reporting shall include, at a minimum:

- Names of employees involved
- Date
- Time
- Location
- Response action
- Quantities of materials spilled

- Quantities of cleanup waste generated
- Outside contractors used
- NYSDEC notification
- NYSDEC spill number
- Date of waste disposal
- Waste disposal manifests

3.6 Sampling

Stormwater sampling has not been conducted to date. Future sampling results will be included in an appendix.

3.7 Erosion and Sediment Controls

The Highway Department is developed on a relatively level property with grades ranging from 0-3%. There is an open area to the south of the office area that is utilized for screening fill. This area is monitored on a daily basis for erosion. The unnamed surface water body bordering the western portion of the property will be protected by a new dike installed along the northwest perimeter of the site as shown in Figure 2. This dike will prevent stormwater from entering into the water body. In addition, salt and sand are mixed outside the storage barns, and then scraped and placed under a covered storage building.

Runoff from the east side of the site will be collected within a sediment forebay that will be installed as part of the stormwater management system for the Municipal Garage (see Figure 2 in Municipal Garage SWPPP).

3.8 Management of Runoff

Stormwater runoff will be diverted away from the soil screening area and the sand/salt storage area so that the runoff will not be contaminated before it infiltrates into the ground. This will minimize erosion of the screening area, and contamination of the stormwater with salts. The area between the proposed sand/salt mixing pad and the screening area will be graded to direct sheet flow south to the sediment forebay for pre-treatment prior to discharge to the wetland

Existing leaching pools are located on the west and north sides of the office building to collect roof runoff.

3.9 Employee Training

Employee training is applicable to all levels of responsibility. Components of the SWPPP include jurisdiction levels, beneficial effects, potential consequences and levels of responsibilities of the plan. Highway Department employees are also trained on sediment and erosion control, good housekeeping, OSHA issues and spill prevention and response.

New employees will receive SWPPP training prior to commencement of activities. Annual refresher training will be provided to all employees.

3.10 Non-Stormwater Discharges

Vehicle and construction equipment washing was formerly conducted in the paved area west of the municipal garage building. This activity has since been terminated. The Town is currently planning for Town vehicles and construction equipment to be washed in a paved area at the Highway Yard (see above and Figure 2). Wash water will be collected by a drain with a holding tank, removed by the Sanitation Department and transported for treatment to the Scavenger Waste Plant.

SECTION 4: INSPECTIONS

Routine inspections of the equipment and facilities will be conducted quarterly. A visual assessment which captures snowmelt discharge will be conducted annually. Inspection reports will be prepared and maintained on site. Records will be maintained for a minimum of one year.

The overall program effectiveness will be evaluated with subsequent recommendations issued and plan amendments implemented. All revisions, changes, or management activities identified during the evaluation will be completed within 12 weeks of the evaluation. Once the evaluation has been completed, a summary report will be prepared. The report will contain:

- The scope of the evaluation;
- Personnel performing the evaluation;
- The date(s) of the evaluation; and
- Actions to be taken as a result of the evaluation

The report will identify any incidents of noncompliance or certify that the facility is in compliance with the SWPPP. The report will be signed by the appropriate SWPPP representative and kept on file with the plan.

A copy of the weekly Facility Inspection Checklist is included in Attachment C and a copy of the Annual Compliance Evaluation Report form is located in Attachment D.

SECTION 5: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator Name: George Woodson Owner/Operator Title: Highway Department Superintendant

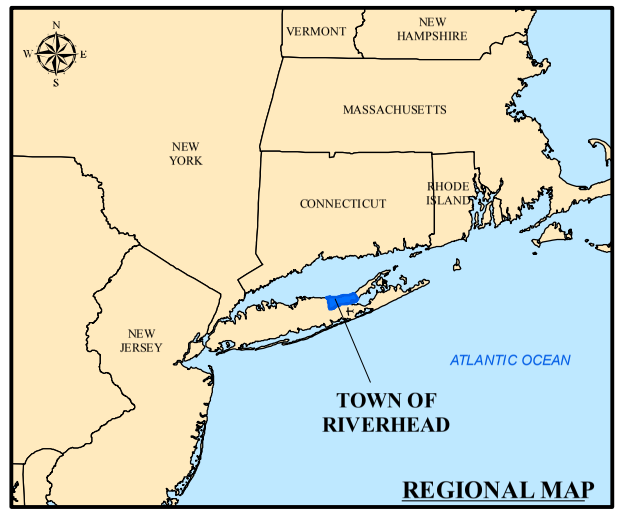
Owner/Operator Signature: _____ Date: _____

SECTION 6: SWPPP MODIFICATIONS

SWPPP Amendment Log

Amend. No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]
1	Added text reflecting maintenance activity of sweeping outside the salt barn upon completion of each mixing operation but at least daily.	4/3/12	Drew Dillingham Ass Town Eng
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

ATTACHMENT A



LONG ISLAND SOUND

ATLANTIC OCEAN

Jamesport State Park

NORTHVILLE

BAITING HOLLOW

Wildwood State Park

WADING RIVER

Main Rd

JAMESPORT

AQUEBOGUE

Route 25A

SITE

Calverton National Cemetery

State Hwy 25

Middle Country Rd

RIVERHEAD

E Main St

FLANDERS BAY

W Main St

Nugent Dr

CALVERTON

Enterprise Park at Calverton (EPCAL)

Rail Access

Flanders Rd

Edwards Ave

Suffolk County Court

Riverhead-Hampton Bays Rd

I 495

State Hwy 27

Miles
0 0.25 0.5 1

HIGHWAY DEPARTMENT

TOWN OF RIVERHEAD

Suffolk County
State of New York

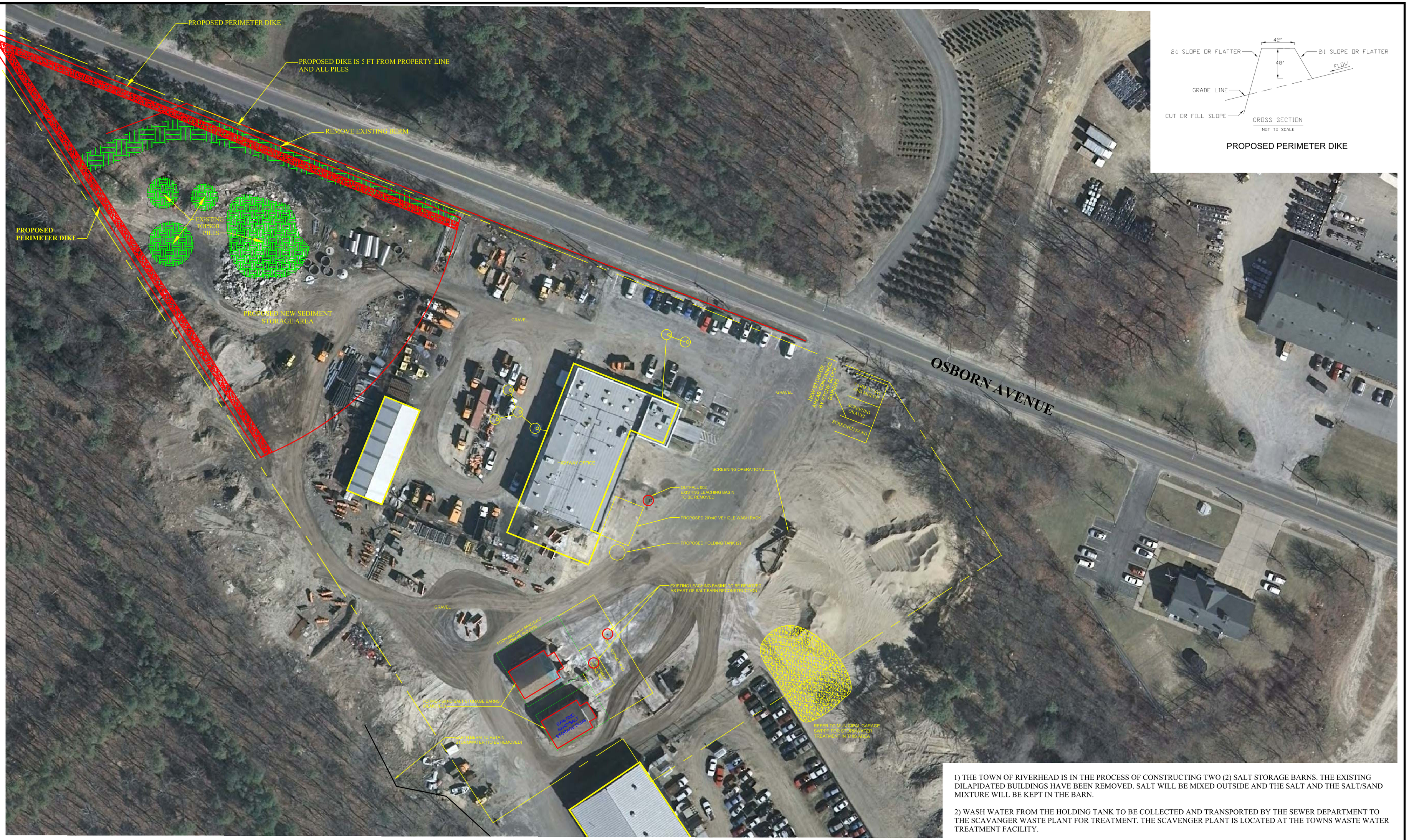
LEGEND

- Town Roads
- County Roads
- Interstate/State Roads
- Railroad
- Town Boundary

GENERAL LOCATION MAP

Figure 1

ATTACHMENT B



PROPOSED PERIMETER DIKE

1) THE TOWN OF RIVERHEAD IS IN THE PROCESS OF CONSTRUCTING TWO (2) SALT STORAGE BARNS. THE EXISTING DILAPIDATED BUILDINGS HAVE BEEN REMOVED. SALT WILL BE MIXED OUTSIDE AND THE SALT AND THE SALT/SAND MIXTURE WILL BE KEPT IN THE BARN.

2) WASH WATER FROM THE HOLDING TANK TO BE COLLECTED AND TRANSPORTED BY THE SEWER DEPARTMENT TO THE SCAVANGER WASTE PLANT FOR TREATMENT. THE SCAVENGER PLANT IS LOCATED AT THE TOWNS WASTE WATER TREATMENT FACILITY.

TOWN OF RIVERHEAD
200 HOWELL AVENUE
RIVERHEAD NEW YORK 11901

NO.	DATE	DESCRIPTION
1	3/14/2011	UPDATED FOR SALT STORAGE BARN RECONSTRUCTION & PROP. OPERATIONS CHANGES

TOWN OF RIVERHEAD HIGHWAY DEPARTMENT

STORM WATER POLLUTION PREVENTION PLAN

DATE: JANUARY 2011

DRAWN BY: CF/DD/RH

SCALE: 1" = 40'

SITE MAP
Figure 2

ATTACHMENT C

Weekly Inspection Checklist

Facility Name:_____

Date:_____

Time Inspection Began:_____ Time Inspection Ended:_____

Weather Conditions_____

Inspectors Name:_____

General

Comments:_____

_____

_____

_____

General Site Conditions

	Problem	
	Yes	No
Roadways, access ramps, loading-unloading (evidence of spills, leaks, odors or unauthorized discharge)		
Structural Controls		
Tanks and Containers		
Drainage Areas:		
Obstructions		
Evidence of erosion		
Presence of windblown debris		
Ponding of water		

ATTACHMENT D

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION FORM

I. Date of Evaluation: _____

II. Personnel Performing Evaluation: _____

_____

_____

III. Scope of Evaluation

The annual compliance evaluation included a review of the site's storm water pollution prevention plan as well as the on-site management practices and structural controls. The plan was reviewed to verify the permit requirements for such items as personnel training, inspections and sampling procedures had been met in the previous year. A review of the site was performed to identify if any evidence, or the potential of contamination was present. In addition, the following questions were addressed during the evaluation.

- Are there any new or previously unidentified areas not included in the plan?
- Are there any new or previously unidentified pollutants not included in the plan?
- Are the current measures to reduce pollutants adequate?
- Are the structural devices and controls operating correctly?
- Are the structural devices and controls implemented as described in the plan?
- Are additional devices or controls needed?

Incidents of non-compliance identified in the evaluation must be addressed in this report.

IV. Actions to be Undertaken

Are actions to be taken or revisions to the stonn water plan required? Yes No

If yes, describe: _

_____

_____

_____

If plan revisions are necessary, they must be completed within 2 weeks of this evaluation. Modifications to the storm water plan or implementation of non-structural measures or controls must be completed within 12 weeks of the evaluation. Changes which require construction of structural measures or controls must be completed within 3 years of the evaluation.

V. Certification

I hereby certify that I have evaluated the storm water program of the Riverhead Municipal Garage and determined that the site is in compliance with both the current storm water permit and storm water pollution prevention plan.

Signature: _____

Title: Superintendent, Sanitation

Date: _____

* Retain a copy of this report in the plan for at least 3 years.

TOWN OF RIVERHEAD

TOWN HALL WEST

STORMWATER POLLUTION PREVENTION PLAN

JANUARY 2011

Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200 Ext. 201

Stormwater Pollution Prevention Plan for:

Town Hall West
1295 Pulaski Street
Riverhead, New York 11901
SCTM NO. 0600-121-1-7
(631) 727-3200 x 201

SWPPP Contact(s):

Town of Riverhead
Ken Testa
1295 Pulaski Street
Riverhead, New York 11901
(631) 727-3200 x 279

SWPPP Preparation Date:

1/7/2011

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1.3 SWPPP Team 2
1.4 Activities at the Facility 3
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2.3 Non-Stormwater Discharges Documentation 4
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Attachment A – General Location Map
Attachment B – Site Map
Attachment C - Facility Inspection Checklist
Attachment D - Annual Comprehensive Site Compliance Evaluation

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Town Hall West

Street: 1295 Pulaski Street

City: Riverhead State: NY ZIP Code: 11901

County or Similar Subdivision: Suffolk County

Latitude: 40°55'22" Longitude: -72°41'17"

Method for determining latitude/longitude: EPA Web site

Is the facility located in Indian Country? ☐ Yes X No

Is this facility considered a Federal Facility? ☐ Yes X No

Estimated area of industrial activity at site exposed to stormwater: 0.6 (acres)

Discharge Information

Does this facility discharge stormwater into an MS4? ☐ Yes X No

If yes, name of MS4 operator: _____

Name(s) of water(s) that receive stormwater from your facility NYSDEC Fresh Water Wetland R-5.

Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes X No

If Yes, identify name of the impaired water (and segment, if applicable):

Identify the pollutant(s) causing the impairment:

For pollutants identified, which do you have reason to believe will be present in your discharge?

For pollutants identified, which have a completed TMDL?

Do you discharge into a receiving water designated as a Tier 2 (or Tier 2.5) water? ☐ Yes X No

Are any of your stormwater discharges subject to effluent guidelines? ☐ Yes X No

If Yes, which guidelines apply?

Primary SIC Code or 2-letter Activity Code: NA

(refer to Appendix D of the 2006 MSGP)

Identify your applicable sector and subsector: NA

A map of the facility's general location is included in Attachment A as Figure 1.

1.2 Contact Information/Responsible Parties

Facility Operator (s):
Name: Town of Riverhead Town Hall West, Guy Cawley
Address: 1295 Pulaski Street
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 466-0900
Email address:
Fax number: (631) 369-7739

Facility Owner (s):
Name: Town of Riverhead, Ken Testa
Address: 1295 Pulaski Street
City, State, Zip Code: Riverhead, NY 11901
Telephone Number: (631) 727-3200 x 201
Email address: testa@riverheadli.com
Fax number: (631) 369-7739

SWPPP Contact:
Name: Drew Dillingham, P.E., Christine Fetten, P.E.,
Telephone number (631) 727-3200-201/282
Fax number: (631) 369-7739

1.3 SWPPP Team

Staff Names	Individual Responsibilities
James Wooten	As liaison to the Town Board for Riverhead's MS4 program, Mr. Wooten appropriates the funding necessary to implement and maintain pollution prevention measures required by the SWPPP. Mr. Wooten informs the Town Board of any changes to facility operations that would cause modification to the SWPPP.
Ken Testa	Mr. Testa defines an appropriate set of goals for the SWPPP and monitors overall implementation of the plan.
Guy Cawley	Mr. Cawley implements SWPPP requirements in conjunction with daily facility operations. He also reviews any changes in facility operations and determines whether modifications are needed to the SWPPP.

1.4 Activities at the Facility

The following activities are conducted at Town Hall West:

- Woodworking and storage of materials to support repair and construction of Town structures.
- Service and repair of Town lawnmowers and other light landscape equipment.
- Storage and application of agricultural chemicals for landscaping purposes.
- Storage of materials and equipment for street lighting and traffic signals maintenance and repair.
- Storage of materials and equipment for the installation, maintenance and repair of electrical work throughout the Town.

A copy of the facility site map is included in Attachment B as Figure 2.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
Interior Cleaning	Aerosol air freshener, aerosol baseboard stripper, aerosol disinfectant, aerosol dust mop/dust cloth treatment, aerosol furniture polish, aerosol glass and multi-purpose cleaner, aerosol stainless steel cleaner, all-purpose cleaner, ammonia, bleach, butyl industrial cleaner, carpet prespray and spotter, chlorinal industrial cleaner, disinfectant deodorant, finish and wax liquidator, floor finish, germicidal toilet bowl cleaner, glass cleaner, grill, oven and fat fry cleaner, hand and body cleanser, insecticide, liquid cleaning compound – spot remover, liquid disinfectant, liquid hand soap, speed stripper, toilet/urinal deodorant, tub and tile cleaner, underseal and floor conditioner.
Paint and paint removal	Acrylic interior/exterior coating, acrylic interior latex enamel, aerosol metallic primer, topcoat and epoxy enamel, alkyd floor and deck enamel, aluminum heat resistant paint, compartment plastic enamel, exterior oil finish, graffiti remover, graffiti shadow remover, interior flat paint, mineral spirits, oil base exterior paint, polyurethane-drying oil clear finish, petroleum base lubricant, protective coating, resinoid bonded grinding wheels, semi

	gloss paint, silicon carbide bond, solvent base paint, water reducible alkyd exterior clear finish, water base paint, water reducible alkyd interior clear finish.
Exterior maintenance	Calcium chloride solid

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Fuel oil storage tank (south east corner of site beneath concrete apron) – 1,000 gallons	NYSDEC Wetland R-5 (sheet flow).

Description of Past Spills/Leaks
No spills or leaks have occurred at Town Hall West during the past three years.

2.3 Non-Stormwater Discharges Documentation

- Date of evaluation: August 1 and 2, 2010.
- Description of the evaluation criteria used: Visual inspection.
- List of the outfalls or onsite drainage points that were directly observed during the evaluation: Two main drainage points were observed. Stormwater runoff accumulates along the east and west sides of the site and discharges via sheet flow at the south end of the site and ultimately to NYSDEC Wetland R-5.
- Different types of non-stormwater discharge(s) and source locations: Discharges to the on-site dry well system located along the east side of the property originate from the parking area. These non-stormwater discharges are comprised of vehicular wash water.
- Action(s) taken, to eliminate unauthorized discharges: On-site washing of vehicles and construction equipment have ceased. Future plans consist of washing Highway Department vehicles and construction equipment at the Scavenger Waste Plant where wash water would be collected and treated. The Scavenger Waste Plant is located at the Town's Wastewater Treatment Facility.

SECTION 3: STORMWATER CONTROL MEASURES

3.1 Good Housekeeping

Town Hall West maintains a clean, orderly work environment in that materials and equipment are neat and well-kept to prevent releases to the environment. Operations are actively maintained in a clean and environmentally friendly manner. Efforts are undertaken to collect, recycle and/or dispose of all excess used materials.

Town Hall West utilizes a three-step process to implement Good Housekeeping measures:

1. Identifying and designating a storage area for every material and every piece of equipment at the garage.
2. Establishing procedures which require that materials and equipment be placed in or returned to designated areas.
3. Establishing a schedule to check for releases and ensure that any releases are being mitigated.

The Town is currently planning for vehicles and construction equipment to be washed at the Scavenger Waste Plant, located at the Wastewater Treatment Facility, where washwater will be collected and treated.

3.2 Maintenance

Preventative maintenance (PM) includes the periodic inspection, maintenance, and testing of targeted facility equipment and systems. These measures are conducted to reveal conditions which could cause breakdowns or failures and result in the discharge of significant materials into storm water.

Tasks performed for general preventative maintenance are as follows:

- When attaching information to equipment and structures, use bold and bright colors consistent with the approach described for good housekeeping.
- Consider and discuss additional procedures beyond those normally recommended by the manufacturer.
- Coordinate scheduling of activities with facility or unit downtime.
- Track duration of materials storage to support an evaluation of container integrity.
- Stormwater leaching pools and inlet piping will be inspected and maintained annually. Any additional stormwater structures that require installation as a result of this plan will also be inspected and maintained on this schedule.

In addition, mechanical equipment is inspected on a regular basis. The major elements of the inspection program include monitoring for:

- Cracks or structural failures
- Parts or pieces of equipment not functioning properly
- Degradation or deterioration of equipment
- Equipment in need of cleaning or emptying
- Visual staining in proximity to equipment/vehicles
- Potential releases of any toxic or hazardous materials such as fuel or hydraulic fluid

3.3 Materials Compatibility

Material Safety Data Sheets (MSDS) shall be maintained for each product that is stored or handled at the facility. A three year history shall be maintained for each product detailing any significant leaks or spills, the date, volume, cause and description of the spill, corrective action taken and measures taken to prevent future spills. All storage tanks, containers and associated equipment are designed to be compatible with the respective material stored or handled. All

materials, which may be incompatible with other material are separated and stored in different locations to prevent their coming in contact with each other. Proper labels and signs are used as required.

3.4 Security

A security plan describes the system installed to prevent accidental or intentional entry to a facility that might result in vandalism, theft, sabotage, or other improper or illegal use of the facility. The Town Hall West facility has active burglar and fire alarm systems. All chemical and petroleum products shall be stored in controlled access areas. Valves shall be locked to prevent unauthorized discharges from the secondary containment structures, tanks and hoses. Town Hall West is a fenced and gated facility preventing unauthorized use during off hours.

3.5 Spill Prevention and Response

In the event of a spill, a prompt response is the best means of minimizing any impact to the environment and, in particular, preventing a discharge from reaching the waters of New York State. The operator or employee first becoming aware of a petroleum product spill will assume the role of temporary spill coordinator until he/she can notify the facility's primary spill coordinator. If the temporary spill coordinator is unable to notify the primary spill coordinator or a backup spill coordinator, then he/she will assume the responsibility of implementing an emergency spill response procedure. All employees who could possibly be in the position of having to assume the role of a temporary spill coordinator will be trained in the appropriate health and safety procedures and the implementation of emergency spill response procedures. If they cannot notify the primary spill coordinator or a backup spill coordinator, he or she will be trained in contacting a spill response contractor.

The following agencies shall be notified in the event of a spill include:

Town of Riverhead Police Department	911
Fire Marshall Office	631-727-3200-209
Water Department	631-727-3200-234
Engineering Department	631-727-3200-201

New York State Department of Environmental Conservation Spills Response Hotline	1-800-457-7362

Town Hall West will implement an emergency spill response for any spill, leak, or release of any petroleum product that could reasonably discharge into waters of the State. Emergency spill procedures will include planning, spill assessment, response, containment/source elimination, cleanup and documentation. Incident reporting shall include, at a minimum:

- Names of employees involved
- Date

- Time
- Location
- Response action
- Quantities of materials spilled
- Quantities of cleanup waste generated
- Outside contractors used
- NYSDEC notification
- NYSDEC spill number
- Date of waste disposal
- Waste disposal manifests

3.6 Erosion and Sediment Controls

Paved areas where sediment buildup is present are swept immediately. All non-paved areas are either stabilized with gravel or with a permanent stand of grass. Stormwater runoff which collects along the east and west sides of the property and discharges at the south end of the site is treated and its velocity reduced prior to entering the NYSDEC wetlands behind the Town Hall West buildings. Treatment and velocity reduction occurs when the stormwater enters wooded areas prior to the wetland.

3.7 Management of Runoff

Existing leaching pools are located on the east side of the property within the parking area and collect stormwater runoff from the roofs of the buildings. In addition, the wooded buffer area which provides erosion control also serves to manage stormwater runoff.

3.8 Employee Training

Employee training is applicable to all levels of responsibility. Components of the SWPPP include jurisdiction levels, beneficial effects, potential consequences and levels of responsibilities of the plan. Town Hall West employees are also trained in sediment and erosion control, good housekeeping, OSHA issues and spill prevention and response.

New employees will receive SWPPP training prior to commencement of activities. Annual refresher training will be provided to all employees.

3.9 Non-Stormwater Discharges

Vehicle washing was formerly conducted in the paved parking area on the east side of the site. This activity has since been terminated. The Town is currently planning for vehicles and construction equipment to be washed at the Scavenger Waste Plant, located at the Wastewater Treatment Facility, where washwater will be collected and treated.

SECTION 4: INSPECTIONS

Routine inspections of the equipment and facilities will be conducted weekly. A visual assessment which captures snowmelt discharge will be conducted annually. Inspection reports will be prepared and maintained on site. Records will be maintained for a minimum of three (3) years.

The overall program effectiveness will be evaluated with subsequent recommendations issued and plan amendments implemented. All revisions, changes, or management activities identified during the evaluation will be completed within 12 weeks of the evaluation. Once the evaluation has been completed, a summary report will be prepared. The report will contain:

- The scope of the evaluation;
- Personnel performing the evaluation;
- The date(s) of the evaluation; and
- Actions to be taken as a result of the evaluation.

The report will identify any incidents of noncompliance or certify that the facility is in compliance with the SWPPP. The report will be signed by the appropriate SWPPP representative and kept on file with the plan.

A copy of the weekly Facility Inspection Checklist is included in Appendix C and a copy of the Annual Compliance Evaluation Report form is located in Appendix D.

SECTION 5: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator Name: Ken Testa Owner/Operator Title: Town Engineer

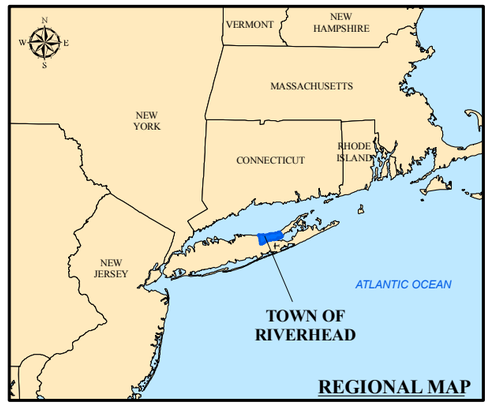
Owner/Operator Signature: _____ Date: _____

SECTION 6: SWPPP MODIFICATIONS

SWPPP Amendment Log

Amend. No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

ATTACHMENT A



LONG ISLAND SOUND

NORTHVILLE

Jamesport State Park

Main Rd

JAMESPORT

AQUEBOGUE

BAITING HOLLOW

Wildwood State Park

WADING RIVER

Route 25A

Calverton National Cemetery

State Hwy 25

Middle Country Rd

SITE

RIVERHEAD

Main St

W Main St

Nugent Dr

Flanders Rd

FLANDERS BAY

CALVERTON

Enterprise Park at Calverton (EPCAL)

Rail Access

Edwards Ave

Suffolk County Court

Riverhead-Hampton Bays Rd

State Hwy 27

I 495

Miles
0 0.25 0.5 1

TOWN HALL WEST

TOWN OF RIVERHEAD

Suffolk County
State of New York

LEGEND

- Town Roads
- County Roads
- Interstate/State Roads
- Railroad
- Town Boundary

GENERAL LOCATION MAP

Figure 1

ATTACHMENT B

MANHOLE
8 INCH WATER MAIN
10 INCH WATER MAIN
MANHOLE
FIRE HYDRANT
MANHOLE
WATER SERVICE
Pulaski Street
19 FT
23 FT
GATE
LIGHT POLE
CHAIN LINK FENCE (6ft)
Impervious Surfaces (Hatched)
2 FT MANHOLE
17 FT
SEWER MANHOLES 8 FT DIAMETER SANITARY SYSTEM (TYP.)
14 FT
21 FT
10 FT DIA BY 4 FT DEEP LEACHING POOLS (TYP.)
OIL FILL AREA WITH 1000 GALLON TANK
Offices
20 FT
20 FT
Conference Room
Concrete Pad with Electric Box
Mechanical Room Boiler
19 FT
19 FT
Warm Storage Area
Mechanical Shop Welding
15 FT
18 FT
18 FT
18 FT
ROOF DRAIN DRAINS
17 FT
16 FT
14 FT
Central Receiving Area
Concrete Pad
LIGHT POLE
Wood Shop
Buildings and Grounds Truck and Equipment Storage Area and Open Work Area for Lawn Mower Repairs
Stairs
ROOF DRAIN
20 FT
GARAGE DOOR
CHAIN LINK FENCE (6ft)
13 FT
14 FT
15 FT
NYS DEC FRESHWATER WETLANDS R-5
NYS DEC FRESHWATER WETLANDS R-5

TOWN OF RIVERHEAD
200 HOWELL AVENUE
RIVERHEAD NEW YORK 11901

NO.	DATE	DESCRIPTION

TOWN OF RIVERHEAD TOWN HALL WEST

BEST MANAGEMENT PRACTICES PLAN

DATE: August 2010

DRAWN BY: Thomas Houghton

SCALE: 1:30 (30 15 0 15 30)

SITE MAP

ATTACHMENT C

Weekly Inspection Checklist

Facility Name:_____

Date:_____

Time Inspection Began:_____ Time Inspection Ended:_____

Weather Conditions_____

Inspectors Name:_____

General

Comments:_____

_____

_____

_____

General Site Conditions

	Problem	
	Yes	No
Roadways, access ramps, loading-unloading (evidence of spills, leaks, odors or unauthorized discharge)		
Structural Controls		
Tanks and Containers		
Drainage Areas:		
Obstructions		
Evidence of erosion		
Presence of windblown debris		
Ponding of water		

ATTACHMENT D

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION FORM

I. Date of Evaluation: _____

II. Personnel Performing Evaluation: _____

_____

_____

III. Scope of Evaluation

The annual compliance evaluation included a review of the site's storm water pollution prevention plan as well as the on-site management practices and structural controls. The plan was reviewed to verify the permit requirements for such items as personnel training, inspections and sampling procedures had been met in the previous year. A review of the site was performed to identify if any evidence, or the potential of contamination was present. In addition, the following questions were addressed during the evaluation.

- Are there any new or previously unidentified areas not included in the plan?
- Are there any new or previously unidentified pollutants not included in the plan?
- Are the current measures to reduce pollutants adequate?
- Are the structural devices and controls operating correctly?
- Are the structural devices and controls implemented as described in the plan?
- Are additional devices or controls needed?

Incidents of non-compliance identified in the evaluation must be addressed in this report.

IV. Actions to be Undertaken

Are actions to be taken or revisions to the stonn water plan required? Yes No

If yes, describe: _

_____

_____

_____

If plan revisions are necessary, they must be completed within 2 weeks of this evaluation. Modifications to the storm water plan or implementation of non-structural measures or controls must be completed within 12 weeks of the evaluation. Changes which require construction of structural measures or controls must be completed within 3 years of the evaluation.

V. Certification

I hereby certify that I have evaluated the storm water program of the Riverhead Town Hall W. 1295 Pulaski r and determined that the site is in compliance with both the current storm water permit and storm water pollution prevention plan.

Signature: _____

Title: Superintendent, Ken Testa, P.E., Town Engineer _

Date: _____

* Retain a copy of this report in the plan for at least 3 years.

APPENDIX I

EMPLOYEE POLLUTION PREVENTION AND GOOD HOUSEKEEPING TRAINING PROGRAM PLAN

MUNICIPAL OPERATIONS ANALYSIS

DEPARTMENT OPERATIONS SPREADSHEET

TRAINING ATTENDANCE SHEETS

HIGHWAY DEPARTMENT

BUILDINGS AND GROUNDS

WATER DISTRICT

SEWER DISTRICTS

DEPARTMENT OF SANITATION

INVENTORY OF TOWN MOTOR VEHICLES

1. PROGRAM REQUIREMENTS

   The United States Environmental Protection Agency's (USEPA) Stormwater Phase II Final Rule and the New York State's MS4 Phase II Stormwater Permit Program require an Operator of a regulated small MS4 to:

   A. Design and implement an operation and maintenance program to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal operations and facilities;
   B. Include a training component in the program on pollution prevention and good housekeeping techniques in municipal operations;
   C. Select and implement manage practices for pollution prevention and good housekeeping in municipal operations and;
   D. Develop measurable goals to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.

   The Town of Riverhead has fashioned this program to meet the requirements of the Federal and State program utilizing different resources to obtain the below described program.

   This program plan will describe the existing Town Operations, methods for self assessments, the local areas considered priorities, principles for pollution prevention, specific facility Best Management Plan overviews, as well as our evaluation and measurement of success for implementing this plan.

2. EXISTING TOWN OPERATIONS

   The Town of Riverhead contains a municipal structure that includes the following departments/divisions as shown in Figure 2-1 that perform operations that sustain the municipal government for the Town.

Town of Riverhead
MS4 General Permit- Town Functions

Building Department		Engineering Department		Highway Department		Municipal Garage		Planning Department - 6		Police Department		Recreation Department		Sanitation Department		Senior Center		Sewer District		Water District 15	
Leroy Barnes, Jr.		Ken Testa, P.E., Town Engineer		George Woodson		John Reeve		Richard Hanley		Chief David Hegermiller		Ray Coyne		John Reeve		Judy Doll		Michael Reichel		Gary Pendzick	
Total # of Employees = 12		Total # of Employees = 28		Total # of Employees = 36		Total # of Employees = 5		Total # of Employees = 6		Total # of Employees =		Total # of Employees =		Total # of Employees = 4		Total # of Employees = 23		Total # of Employees = 14		Total # of Employees = 13	
Subdivisions	**Operations**	**Subdivision**	**Operations**	**Subdivision**	**Operations**	**Subdivision**	**Operations**	**Subdivision**	**Operations**	**Subdivision**	**Operations**	**Subdivisions**	**Operations**	**Subdivision**	**Operations**	**Subdivision**	**Operations**	**15 Employees**		**Subdivision**	**Operations**
	Excavation Permits	Buildings and Grounds	14		Expired Animal Removal		Municipal Fueling		Site Plan Review	Emergency Management		Sports Programs		Solid Waste Management Plan			Meals on Wheels	**Subdivision**	**Operations**		Potable Water Treatment
	Foundation Permits		Municipal Building Maint.		Winter Road Maint.		Impound Yard					Intergenerational Programs			Bid Residential Pick up		Recreational	Sewer District	Sewage Treatment		Water Storage
	Building Permits		Municipal Park Maint.		Storm Drain Maint.		Fleet Maintenance					Recreation Programs			Recycling Program		Food Service		Scavenger Waste		Fleet Storage
			Fleet Storage		Street Sweeping					Detectives					Commercial Recycling		Senior Bus Service		Fleet Storage		Testing
			Capital Improvement Proj		Flood Control									Yard Waste			Fleet Storage	Scavenger Waste	Testing		
		Electrical Services/Street Lighting =4			Street Repair and Maint.									Municipal Waste							
			Street Lights Maint.		Right Of Way Maint.					Sergeants											
			Traffic Signal Maint.		Capital Improv.									Landfill - Capped				Outside Collection			
			Electrical Upgrades		Fleet Storage													Pump stations			
			Fleet Storage	Traffic Safety Committee						Police Officers								Gravity Force Mn.			
		Fire Marshals = 4									Fleet Storage		Fleet Storage		Fleet Storage						
			Fire Department Liaison																		
			Fire Scene Inspections							Dog Pound											
			NYSDEC Spills Liaison																		
		Geographic Information Systems = 1								Traffic Safety Committee											
			Stormwater Mapping							Bay Constable											
			Town wide Mapping services								Dams & Dam Upgrade										
			Web Map Application Dev.								Pump out Boat							**Stormwater Pollutants**		**Stormwater Pollutants**	
		Engineering Department = 5									pump out stations							7000 gal Methanol Tank			
			Stormwater Management																Ferric Chloride (UST)		Calcium Hypochlorite tablets (indoors)
			Capital Improvements																Gaseous Chlorine (indoors)		Calcium Hydroxide (50# bags indoors)
			Facility Improvements																Potassium Permanganate (indoors)		Diesel Fuel-(4) 500 gal AST
			Traffic Safety Committee																Solid Chlorine (indoors)		(3) 1,000 gal AST
			Dark Skies Committee																Diesel Fuel -1,000 gal UST		Diesel Fuel (2) 300 gal AST
Stormwater Pollutants		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**		**Stormwater Pollutants**			Waste Oil - 275 gal AST		Diesel Fuel (1) 270 gal AST
Construction Sites	MCM 4 - GP-0-10-001	**B&G**	Sediment		Sediment		Leaking Vehicles				Leaking Vehicles		Line striping paint		Sediment				WWTP Emer Gen. 1650 gal ABS -Oil		675 gall AST- Generator
	Sediments		Fertilizers		Hydro-carbons		Hydro-carbons				Pathogens		Lime		Toxins				275 gal. DW AST Riverside Dr. PS-Diesel		propane (2) 2,000 gal UST
	Trash		Pesticides		Toxins		Anti-freeze								Trash				275 gal. DW AST Defriest PS-Diesel		Muratic Acid - Small quantity indoors
	Petroleum Products		Hydro-carbons		Line Striping Paint		Battery Acid												275 gal. DW AST Howell Ave PS Diesel		
			Toxins		Trash in ROW		Brake Fluid												275 gal DW AST Ostrander Ave PS Diesel		
			Lead Based Paint - East Lawn		Chlorides		Transmission Fluids												275 gal DW AST Raynor Ave PS-Diesel		
			Asbestos - Weeping Willow		Lubricating Oils		Sediment												550 gal DW UST W. Main St. PS-Diesel		
		Electrical Services/Street Lighting			Waste Oil		Chlorides												Tanger Rt 58 PS- Gas		
			Mercury Containing Mtl				Diesel xxxx gal UST												Rt. 58 PS- Gas		
			Glass				Gasoline xxx gal UST												Middle Road PS- Gas		
			Hydro-carbons				Waste Oil 500 gal AST												Cranberry St. PS- Gas		
			Toxins																Elton St. PS-Gas		

Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts	Best Management Concepts
Develop Sanitary Inspection Program for parcels located within Impaired Watershed Areas Triggered on Building Application Process -Req'd	Remove UST at 1295 Pulaski Street	Construct new salt storage barns	Construct Vehicle Washing Area	Work with code revisions to encourage more green technologies		Incorporate stormwater education and involvement into recreation programs	Begin education component - req'd	Develop a composting program on site	Comply with existing SPDES	Develop dedicated blow off area for lime discharge
	Construct lean to for Plow Storage	Construct lean-to structure over salt spreaders	Construct Canopy over Fuel Island				Begin tracking of waste stream - req	Remove 1,000 gallon UST	Progress smoke testing to determine interconnects with sanitary sewer system	
	Implement Turf Management Program - Req'd	cemetery	Area				Begin commercial recycling program-req'd		Abandon 7,000 gal Methanol storage tank	
	Implement Integrated Pest Management Program - Req'd	pollutants	parking area			Incorporate more recycling efforts in parks			Diesel Tank, replace with gas feed	
	SOPs for deploying Sediment and Erosion Controls	Re-grade facility to allow stormwater to infiltrate							Develop 750kw Wind Turbine to shed 40% of LIPA Load at WWTP	
	Develop method to keep bball infield mtl from migrating	SOPs for deploying Sed.& Erosion Controls								
	Remove 1,000 gal. UST at Henry Phieffer Comm. Ctr									
Public Education Opportunities	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**	**Public Education Opportunities**
Pamphlets	Pamphlets			Pamphlets						
	Posters									
Public Involvement Opportunities	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**	**Public Involvement Opportunities**
Provide work shops and training opportunities	Pet Waste Management - Country Fair	Leaf Collection		opportunities for developers						
	provide work shops and training opportunities for contractors and consultants	provide work shops and training opportunities for contractors				provide work shops and training opportunities fo				
	Rain Gardens at Parks									
	Distribution of annual perrenial seeds									
Active Areas that Are Progressive	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**	**Active Areas that Are Progressive**
	B&G Recycled Oil	Farm Stormwater Cooperation's	Recycled oil tanks		Boater Pumpout	Deployed additional waste receptacles in parks	STOP DAY			
	Recycled municipal Mercury Containing Bulbs	Leaf Pick Ups	Upgraded underground storage tanks				E-Waste Recycling Opportunities			

Town of Riverhead
MS4 General Permit- Town Functions

Building Department	Engineering Department		Highway Department	Municipal Garage	Planning Department - 6	Police Department	Recreation Department	Sanitation Department	Senior Center	Sewer District	Water District 15
Leroy Barnes, Jr.	Ken Testa, P.E., Town Engineer		George Woodson	John Reeve	Richard Hanley	Chief David Hegermiller	Ray Coyne	John Reeve	Judy Doll	Michael Reichel	Gary Pendzick
Maintained Facilities	Maintained Facilities		Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities	Maintained Facilities
755 East Main Street Riverhead	Bayberry Park,	playground & parking lot	1177 Osborne Avenue, Riverhead	Rd, Riverhead		Riverhead	55 Columbus Avenue, Riverhead	483 Youngs Avenue, Riverhead	60 Shade Tree Road, Aquebogue	River Avenue, Riverhead	1035 Pulaski St., Riverhead
	Wading River Duck Ponds	bulkhead, parking lot area, passive park	60 Private Road, off Rt. 25A, Wading River			Animal Control & Adoption Center, 532 Youngs Ave., Riverhead				Calverton Sewer District	125-1-4.2 Plant #2, 1144 Pulaski St., Riverhead
	63 Oakland Dr West, Riverhead	playground	Town of Riverhead Roadways, Drainage Basins, outfalls							Riverside Dr. PS	124-1-27 Plant #3 1035 Pulaski St., Riverhead
	Two Bears Park	1/2 basketball court								Defriest PS	Riverhead
	Nadel Park (Joyce Dv), 9 Joyce Drive, Riverhead	Baseball field, play ground equipment - not fertilized								Howell Ave PS	84-3-39.3 Plant #5, 162 Midle Rd., Riverhead
	Railroad Station	(restroom in bldg)								Ostrander Ave	Riverhead
	Tuthill Parking Lot	parking lot								Raynor Ave PS	Calverton
	East Lawn Building,	no parking lot								W. Main St. PS	Calverton
	Griffing Avenue Parking Lot	municipal parking lot								Tanger Rt 58 PS	57-1-1.5, Plant #9, 218 Grt. Rock Dr., Wading River
	Town Hall, 200 Howell Avenue, Riverhead	municipal building and parking lot								Rt. 58 PS	6-2-p/o 6, Plant #10, 160 Sound Shore Rd., Jamesport
	Stotzky Park, 1236 Pulaski Street	flds., 2 tennis cts, 1 basketball cts, 1 lg. playground, leased day								Middle Road PS	135-1-7.29, Plant #11, 5737 Middle Ctry Rd., Calverton
	Peconic Riverfront	parking lot								Cranberry St. PS	Calverton
	Burns Park	small passive park								Elton St. PS	Riverhead
	Grangebel Park	passive waterfront park									Aquebogue
	West Main Street Comfort Station	in active restroom building									46-3-12, Plant #15, 306 Tuthills Lane, Jamesport
	Lombardi Park,	passive park									Calverton
	First St.Parking Lot	municipal public parking									& Northville Tpk.
	Hamilton Ave. Parking Lot	municipal public parking									
	Osborne Ave., Riverhead	municipal bldg, parking lot									
	Jamesport Amb., 20 Manor Lane, Jamesport	municipal bldg, permeable parking lot									
	71 Town Beach Rd, Jamesport	tennis courts, (1) basket ball court, public restroom parking lot									
	Ftly, 75 Town Beach Rd., Jamesport	5 main docks (120 slips), permeable parking lot									
	South Jamesport Boat Launch Facility	bulkhead, launching ramp, parking lot									
	Iron Pier Beach, 344 Pier Avenue, Jamesport	restrooms, removed playground, parking lot									
	Reeve's Beach, 260 Park Road, Riverhead	beach, public restroom, parking lot									
	Hulse Landign Rd., Wading River	beach access, parking lot									
	Meetinghouse Creek Pk., Aquebogue	passive park, parking lot									
	Grumman Air Memorial,	informational park w/airplanes, parking lot									
	Riley Ave., 9-11 Memorial Pk.	passive park									
	Horton Ave., Basketball Court	(1) basketball court, (1) playunit, passive park, permeable parking									
	Park, 5789 Middle Country Rd, Calverton	4 baseball flds									
	Ctr, 446 S. Jamesport Ave., Jamesport	basketball court, playground, parking lot									
	Community Center, 4062 Grumman Blvd,	Municipal bldg, parking lot and playground									
	133 E. Main Street, Riverhead	municipal bldg, passive park area									
	Eastern Suffolk Music School, 141 E. Main Street, Riverhead	municipal bldg, passive park area									
	Town Hall West, 1295 Pulaski St., Riverhead	municipal bldg, parking lot									

3. SELF ASSESSMENT FOR MUNICIPAL OPERATIONS

The Town has Best Management Plans and Stormwater Pollution Prevention Plans for its larger Facilities, some of which are governed by the Multi-Sector Industrial Permit. The Highway Maintenance Facility located at 1177 Osborn Avenue and the Town Municipal Garage located at 1412 Old Country Road have two separate BMP plans, however since they are adjacent properties they are combined under one Multi-Sector Industrial Permit. The Riverhead Sewer District currently operates under a SWPPP plan for site maintenance and stormwater controls.

Beginning in 2010 the Town will conduct formal self-assessments of our existing policies, procedures and activities that related to pollution prevention and good housekeeping. The assessment will identify both strengths and potential gaps or revisions that need to be addressed for compliance with the Phase II Stormwater Permit Requirements. The assessments will be conducted for each of the following operations:

A. Street Maintenance	Highway Department
B. Winter Road Maintenance	Highway Department
C. Stormwater System Maintenance	Highway Department
D. Vehicle and Fleet Maintenance	Municipal Garage
E. Parks and Open Space Maintenance	Buildings and Grounds
F. Municipal Building Maintenance	Buildings and Grounds
G. Solid Waste Management	Sanitation
H. Streambank and Hydrologic Habitat Maintenance	Engineering and Highway

The Town's Self Assessment for each of the operations will comply with the assessment sheets presented below. As these assessments are completed, if there are any additions required to ensure reduction in potential pollutants they will be updated on an annual basis to coincide with the Stormwater Management Plan Program Annual Report preparation period between March and June. As part of our annual training program, the principles and elements of assessments will be presented to the different Town operations in annual training. The assessments will be utilized as one method to evaluate this program for Minimum Control Measure 6. The results of the assessment are utilized to help determine if the necessary steps are being taken and adequate staff and resources are available to achieve compliance with the Phase II Stormwater Permit Requirements.

In addition, to ensure new employees are adequately education in stormwater pollution prevention and good housekeeping policies, new employees will be presented with literature describing our programs and will be given a survey to assess their comprehension of the program and requirements.

4. LOCAL PRIORITIES

Although the long term goal is to implement pollution prevention and good housekeeping town wide, the Town has fiscal and personnel restrictions which require the need to set priority areas based on previous flooding issues, and proximity to impaired water bodies. The pollutants of concern for the Town of Riverhead include sediment, nitrogen, pathogen and floatables. The Town has identified important factors that will warrant program adjustments such as

A. BMP priorities and selection – grassed swales are appropriate in non-developed and farm land areas, where as they do not have community /logistic support in residential neighborhoods.
B. Scheduling and Frequency of BMP Implementation – The Town will implement BMPs where there is a road system failure such as outfalls and or existing drainage structures. In addition, where funding becomes available through FEMA hazard mitigation monies and/or other grant sources BMP Implementation will occur ahead of schedule in priority areas of the Town.
C. Targeting of different operations or facilities for primary emphasis
    a. Fleet washing – 2011
    b. Reduction in Fertilizers Pesticides – begin in 2011
    c. Increased education
D. Need for more advanced technology or system component upgrades or repairs
    a. Fleet Washing
    b. Road Kill Disposal Methods
E. Need for fostering partnerships with businesses or other public entities within the municipality, or other areas within the watershed but outside of the municipality
    a. Working with Farmers to maintain sediment on farmlands through best management practices and joint ventures.
F. Worker training priorities.
    a. Workers in Highway have the greatest ability for improvement and should be priority for training.
    b. 2011 will begin a new worker MS4 training /survey program before manual labor is begun for newly hired workers in Highway, B&G, Water, Sewer, and Sanitation departments.

The Town of Riverhead is adjacent to the Peconic Estuary System and the Long Island Sound which are very popular tourist areas and bountiful with shellfish. The Peconic River has been identified as impaired due to the increased levels of both nitrogen and pathogens and the Long Island Sound has been impaired due to dissolved oxygen. The Town identifies fertilizers and wildlife animal wastes as a source of these high priority pollutants. There is an issue with converting from conventional chemical fertilizers to organic fertilizers which are animal waste based and generally require an increased application to achieve the same results. The Town is investigating different methods to achieve the turf quality desired while attempting to reduce the output of nitrogen into the environmental system. We are consulting with the NYSDEC and Cornell Cooperative Extension on appropriate and effective

BMPs to utilize. In addition, to nitrogen and pathogens, the Municipal Garage and Highway Department are adjacent to wetland areas, and a municipal potable water well, the municipal operations for both of these facilities are being improved by the implementation of the Best Management Plans of both of these facilities that will serve to implement BMPs to reduce pollutants such as salts and hydrocarbons from entering into either surface water and/or groundwater resources. The Highway Department began the capital improvement project to demolish two existing salt storage barns and replace with two new salt storage barns with increased protection from environmental release of salts.

As part of this program plan is an inventory of all Town Facilities including Town of Riverhead owned/maintained municipal operational facilities, recreational facilities, community centers, and other public centers. This will be incorporated to track process by each facility for improvement to the pollution. In addition, a simple department/division database has been developed to track employee resources and their pollution prevent/good housekeeping training activities.

5. GUIDING PRINCIPLES FOR STORMWATER POLLUTION PREVENTION

   The Town of Riverhead is in the active process of preparing and compiling the below referenced information by facility and preparing policies and procedures for different municipality operations. The estimated completion on base procedures will be by June of 2011.

   a. Prevent Pollution at Its Source – Controlling pollutants at their source and preventing their wider release is more efficient and cost-effective than removing them from stormwater runoff or other water treatment. Remove or capture contaminants before stormwater contact; prevent erosion; and provide multiple barriers to pollutant releases at storage and waste sites.
      i. Sweeping streets (abrasives removal, litter, organic debris removal)
      ii. Secondary containment at storage sites
      iii. Revegetating eroding slopes
      iv. Early capture of hydrocarbons by pretreatment vaults
      v. Animal waste collection and management

   b. Manage Clean Water Runoff and Minimize Pollutant Exposure to Clean Water – Prevent clean water runoff and precipitation from contacting potential pollutants and prevent mixing of clean runoff with polluted water flows.
      i. Structural cover of storage sites
      ii. Roof drainage management
      iii. Site drainage design/runoff diversion
      iv. Maximize infiltration of runoff

   c. Minimize Use of Potential Pollutants – Examine municipal use of all chemicals and other potential pollutants and identify methods of eliminating, reducing or better targeting their use in municipal operations and facilities (including alternative products).
      i. Reduced or alternative pesticide use

ii. Reduced fertilizer use
iii. Reduced road salt and abrasives use
iv. Reduced or alternative exterior cleaning product use

d. Plan for Spills and Accidents – Develop spill prevention and response policies and procedures for ALL facilities that use and/or store chemicals (not just petroleum).
   i. Provide secondary containment
   ii. Equip facility to handle any size of spill
   iii. Assign responsible person/team for response
   iv. Post procedures and emergency contacts

e. Practice Preventative Maintenance – Regularly inspect components of stormwater collection, conveyance and treat system; regularly inspect machinery, pipes, storage tanks and other equipment for leaks or worn parts; regularly calibrate application equipment (salts, pesticides, fertilizers); plan for system upgrades and component replacement and repairs.
   i. Containment of minor leaks and spills with drip pans, absorbent pads
   ii. Use of dry cleanup methods rather than washing
   iii. Establish inspection calendar and incorporate into records/data system
   iv. Establish equipment maintenance and calibration calendar and incorporate into records/data system.

f. Identify Potential Pollution Sources – Identify all municipal facilities and operations that could impact stormwater quality; identify potential pollution sources at each site or for each activity; identify, map and inspect the facility's stormwater drainage system
   i. All material storage sites, especially those with any outside loading or unloading operations
   ii. All fueling sites
   iii. All drainage structures and components
   iv. All sites with animal waste concentrations
   v. Pesticides/fertilizer application areas

g. Plan New Facilities to Include Stormwater Pollution Prevention – Include a stormwater pollution prevention component in all municipal facilities and activities; site new facilities to minimize waterbody impacts.
   i. Minimize impervious surfaces through the use of permeable pavers
   ii. Maintain stream buffers
   iii. Infiltrate runoff
   iv. Eliminate pollutant exposure
   v. Provide spill containment measures and structural stormwater management practices.

h. Improve Data Collection, Mapping, and Records Maintenance – Emphasize improvement of data collection and records maintenance to address higher priority pollution sources and contaminants; improvement of geographic information; and

unification of data management across all relevant municipal departments and operations.

i. Incorporate geographic information systems (GIS) into pollution prevention planning
ii. Maintain chemical usage data (pesticides, fertilizers, salts, solvents, etc.)
iii. Maintain inspection, repair, maintenance records
iv. Integrate records maintenance across departments, based on priorities (e.g., pesticide)

i. Train Employees – Train employees regarding stormwater pollution and prevention practices; identify emergency contacts and reporting procedures; seek employee ideas on pollution prevention methods and priorities; reward employees who participate in prevention program.
    i. General education on importance of stormwater pollution control to all employees
    ii. Targeted training on policies, procedures and best management practices for maintenance staff
    iii. Retraining and continuing education on routine basis for maintenance staff bullet boards, web posting for other options for BMP news and updates.
    iv. Establish and continue employee rewards or recognition program.

j. Ensure Code Compliance by having contractors provide 4 hour sediment and erosion control training course completion prior to performing work within the Town of Riverhead as per the Town's MS4 Permit Requirements.

k. Improve Communications and Coordination – Emphasize communication and coordination across key municipal departments and operations; coordinate stormwater and pollution prevention activities with county and state agencies, organizations and institutions; develop public outreach and citizen participation regarding municipal pollution prevention activities.
    i. Establish a municipal pollution prevention team (Engineering, Planning, B&G, Water, Sewer , Highway, Sanitation)
    ii. Participate in Peconic Estuary Program Committees
    iii. Participate in statewide organizations
    iv. Include stormwater pollution prevention column in municipal newsletter and bulletins
    v. Post informational signs at special project sites
    vi. Encourage participation by citizens and business in special events such as hazardous water collection events or community cleanup days.

6. PROGRESSIVE DEVELOPMENT OF FACILITY BEST MANAGEMENT PLANS

The Town of Riverhead Stormwater Program is a comprised of a Best Management Committee BMC that is comprised of all key department heads and a liaison of the Town Board. The BMC communicates through emails and/or scheduled meetings either all

together or individually with the SMO to discuss Town wide goals and individual department goals and or scheduled work. As personnel resources are contingent upon the economic climate, most times the departments work very closely and aid in helping different departments that are short staffed. The Department heads bring industry standards and innovations to the BMP for discussion and implementation into the program. This program plan will include the actual cleanout of municipal system components, the construction of materials storage facilities, the maintenance of facilities, the recycling of wastes and any other field operations that support pollution prevention.

The Town of Riverhead Municipal Operations Anaylsis Score Card

To determine your total score, simply add the subtotals from each section (a negative number) and add 100, which is the maximum possible score that a community can receive

	9/1/2010
Subtotal Hotspot Facility Management (-12 points possible)	-3
Subtotal Construction Project Management (-12 points possible)	-2
Subtotal Street Repair Maintenance (-10 points possible)	-3
Subtotal Street Sweeping (-10 points possible)	0
Subtotal Storm Drain Maintenance (-8 points possible)	-3
Subtotal Stormwater Hotline Response (-10 points possible)	-7
Subtotal Park and Landscape Maintenance (-10 points possible)	-6
Subtotal Residential Stewardship (-10 points possible) **DO NOT INCLUDE IN MOA**	
Subtotal Stormwater Management Practice Maintenance (-10 points possible)	-9
Subtotal Employee Training (-8 points possible)	0

Subtotal All Municipal Operations		-33
Available Points	+	100
Total Score		**67**

The following table will help you estimate the level of effort needed to creat an effective pollution prevention/good housekeeping program in your community:

Score	
90-100	Congradulations! The Town of Riverhead already has many of the elements of an effective pollution prevention/good housekeeping program in place. Focus on combining these elements and creating a well-organized municipal pollution prevention/good housekeeping program.
80-89	The Town of Riverhead has number of the elements of a pollution prevention/good housekeeping program in place, but could use some tweaking in some areas. Revisit the analysis to determine where these improvements are needed.
70-79	Significant opportunities exist to improve your community's pollution prevention efforts. Begin by focusing on the municipal operations that need the most improvement in your community.
60-69	Current pollution prevention/good housekeeping efforts are inadequate and it is likely that your existing municipal operations are negatively impacting local aquatic resources. A significant effort should be made to improve local pollution prevention/good housekeeping efforts.
Less than 60	The Town of Rivehread Municipal Operations are negatively impacting local aquatic resources. A serious effort is needed to improve local pollution prevention/good housekeeping efforts.

Hotspot Facility Management Municipal Operations Analysis (MOA)

	9/1/2010	
Are there any publicly owned or operated stormwater hotspot facilities located within your community?	**Yes** **No**	
If you answer is YES, complete the rest of this section	x	
		Riverhead Highway Yard
How many of the following municipal stormwater hotspot facilities are located within your community?		Wading River Highway Yard
Public Works Yards	2	
		Riverhead Water Plant
*If you have **one or more** public works yards, subtract **1** point*	1	
Vehicle Storage and Maintenance Yards	1	Municipal Garage
Equipment Storage and Maintenance Yards		
Materials Storage Yards		
Wastewater and Water Treatment Facilities	3	Riverhead&Calverton WWTP, Riverhead Water
Landfills	1	Youngs Avenue - Closed
Solid Waste Handling and Transfer Facilities	0	
Hazardous Waste Handling and Transfer Facilities	0	
Compost Facilities		
Public Golf Courses	0	
Public Swimming Pools	0	
Public Buildings	8	200 Howell Ave
		201 Howell Ave
		755 E. Main Str
In total, how many municipal stormwater hotspot facilities are located within your community?	14	60 Shade Tree Lane
		1295 Pulaski St.
*If you have **10 or more** hotspot facilities, subtract **1** point*	-1	446 S. Jamesport Ave
		4062 Grumman Blvd.
Has a simple database that contains basic information about all of the municipal stormwater hotspot located within your community been created?	**Yes** **No** x	55 Columbus Ave.
*If your answer is **NO,** subtract **1** point*	0	
	Yes **No**	
Has a map that shows the locations of all municipal hotspot facilities been created?	x	
*If your answer is **NO,** subtract **1** point*	0	
Have on-site investigations been conducted to identify specific pollution-generating activities and pollution source areas at each municipal stormwater hotspot facility?	**Yes** **No** x	
*If your answer is **NO,** subtract **2** points*	0	
Have pollution prevention plans that identify the pollution prevention/good housekeeping practices (both existing and proposed) used to address specific pollution-generating activities and pollution source areas been created for each municipal hotspot facility?	**Yes** **No** x	
*If your answer is **NO,** subtract **1** point*	0	
Have pollution prevention/good housekeeping practices been implemented and are they effectively controlling and reducing stormwater pollution at municipal hotspot facilities?	**Yes** **No** x	
*If your answer is **NO,** subtract **2** points*	-2	
Is regular stormwater pollution prevention training and education provided to employees working at each of the municipal hotspot facilities?	**Yes** **No** x	
*If your answer is **NO,** subtract **1** point*	0	
Subtotal Hotspot Facility Management *(-12 points possible)*	-3	

Construction Project Management Municipal Operations Analysis

	9/1/2010
Does your community fund or otherwise contribute to capital improvement, development or redevelopment projects? *If your answer is **YES,** complete the rest of this section*	Yes: x / No:
How many capital improvement, development and redevelopment does your community fund in an average year? *If you answered **five or more,** subtract **1** point*	Yes: 7 / No: -1
Has your community drafted and adopted a local erosion and sediment control ordinance? *If your answer is **NO,** subtract **2** points?*	Yes: x / No: 0
Are the 10 critical elements of erosion and sediment control plans, as outlined below, required by the local erosion and sediment control ordinance?	Yes / No
Minimize clearing	x
Protect waterways and stabilize drainage ways	x
Phase Construction	x
Rapid soil stabilization	x
Protect Steep Slopes	x
Perimeter controls	x
Employ advanced settling devices	x
Certified contractors implement plan	x
Assess erosion and sediment control practices after storms	x
*If you answered **NO** to any of the above, subtract **1** point*	-1
Has your community drafted and adopted a local stormwater management ordinance? *If your answer is **NO,** subtract **2** points*	Yes: x / No: 0
Are municipally funded capital improvement, development and redevelopment projects subject to local plan review and site inspection procedures? *If your answer is **NO,** subtract **1** point*	Yes: x / No: 0
Are innovative site design and stormwater management practices that conserve natural areas and reduce impervious cover and stormwater runoff volumes required or encouraged on municipally funded capital improvement, development and redevelopment projects? *If your answer is **NO,** subtract **1** point*	Yes: x / No: 0
Subtotal Construction Project Management *(-12 points possible)*	-2

Capital Improvement, Development and Redevelopment Projects in 2009 (March to March)

Grangebel Park
Weeping Willow Property Acquisition
Oakleigh Avenue
Salt Storaqe Barns
East End Arts Council Sanitary Line Repl.
EPCAL Rail Spur

Street Sweeping Municipal Operations Analysis

	9/1/2010 Yes	No
Does the Town of Riverhead have an established street sweeping program?		
*If your answer is **YES,** complete the rest of this section*	x	
*If your answer is **NO,** subtract **5** points*	0	

Estimate the approximate percentage (%) of public streets and roadways that are swept at least once a month: _____

Which of the following pollutants are targeted by the Town of Riverhead's street sweeping program?	Yes	No
Sediment	x	
Trash and Debris	x	
Leaves and Organic Matter	x	
Nutrients	x	
Other: _____		
*If you answered **NO** to all of the above, subtract **2** points*	0	

	Yes	No
Does the Town of Riverhead schedule leaf pickup and subsequent street sweeping in the fall to pick up leaves and other organic matter?		
*If your answer is **NO,** subtract **2** points*	x 0	

	Yes	No
Does your community schedule street sweeping in the early spring to pick up sand, salt and other street deicing materials?		
*If your answer is **NO,** subtract **2** points*	x 0	

	Yes	No
Does your community use street sweeping equipment (e.g. regenerative air sweepers, vacuum-assist sweepers) that is capable of picking up a wide range of sediment particles?	x	
*If your answer is **NO,** subtract **2** points*	0	

	Yes	No
Does your community provide regular stormwater pollution prevention training and education to employees and contractors involved with street sweeping activities?		
*If your answer is **NO,** subtract **2** points*	x 0	

Subtotal Street Sweeping *(-10 points possible)*	0

Street Repair and Maintenance Municipal Operations Analysis

	9/1/2010 Yes	No
Does your community fund street repair and maintenance projects? *If your answer is* ***YES, complete the rest of this section***	x	

What types of street repair and maintenance projects are community-funded?	Yes	No
Paving	x	
Resurfacing	x	
Pothole Repair	x	
Snow Removal	x	
Deicing and Anti-Icing Operations (application of sand, salt and other deicing materials)	x	
Mowing (within the right-of-way)	x	
Herbicide and Pesticide Application (within the right-of-way)		x
Fertilizer Application (within the right-of-way)		x

	Yes	No	
Are there procedures in place that help prevent paving materials and other potential stormwater pollutants (e.g. salt, pesticides, fertilizers) from entering the municipal storm drain system? *If your answer is* ***NO,*** *subtract* ***3*** *points*		x	-3
Are paving and resurfacing operations conducted during dry weather? *If your answer is* ***NO,*** *subtract* ***2*** *points*	x		0
Are, sand, salt and other roadway deicers properly covered and stored to prevent them from being picked up and conveyed into the storm drain system during storm events? *If your answer is* ***NO,*** *subtract* ***2*** *points*	x		0
Are there procedures in place to help ensure that herbicides, pesticides and fertlizers are properly used within the right-of-way? *If your answer is* ***NO,*** *subtract* ***2*** *points*	x		0
Does your community provide regular stormwater pollution prevention training and education to employees and contractors involved with street repair and maintenance activities? *If your answer is* ***NO,*** *subtract* ***1*** *point*	x		0

Subtotal Street Repair and Maintenance
(-10 points possible)

-3

Storm Drain Maintenance Municipal Operations Analysis (MOA)

	9/1/2010
Are catch basin, inlet, and/or storm drain cleanouts conducted?	Yes No
*If your answer is **YES**, complete the rest of this section*	x
*If your answer is **NO**, subtract **5** points*	0
Estimate the approximate percentage (%) of catch basin, inlet and/or storm drain cleanouts that occur:	
In response to complaints and drainage problems	_____
As part of a regularly scheduled cleanout program	_____
*If more cleanouts occur **"in response to complaints and drainage problems"** than **"as part of a regularly scheduled cleanout program"** subtract **3** points*	
Does the Town of Riverhead have a map that shows the locations of all of its catch basins, inlet and storm drains?	Yes No x
*If your answer is **NO**, subtract **1** point*	0
Does the Town of Riverhead have a database or other tracking system in place to track when and where storm drain maintenance occurs?	Yes No x
*If your answer is **NO**, subtract **2** points*	-2
Are procedures for disposing of materials collected during catch basin, inlet and/or storm drain cleanouts in place?	Yes No x
If your answer is **NO**, subtract **1** point	-1
Does the Town of Riverhead provide regular pollution prevention training and education to employees and contractors involved with storm drain maintenance activities?	Yes No x
*If your answer is **NO**, subtract **1** point*	0
Subtotal Storm Drain Maintenance *(-8 points possible)*	-3

Stormwater Hotline Response Municipal Operations Analysis (MOA)

	9/1/2010 Yes	No
Does the Town of Riverhead have a stormwater hotline that residents can use to report spills, leaks, sanitary sewer overflows, illicit discharges and other water quality problems?	x	
*If your answer is **YES**, complete the rest of this section*	0	
*If your answer is **NO**, subtract 10 points*		
Does the Town of Riverhead have procedures in place for tracking and documenting hotline reports?	Yes	No
	x	
*If your answer is **NO**, subtract **2** points*	0	
What types of water quality problems have previously been reported through the local stormwater hotline?		
Spills		x
Illicit Discharges	x	
Combined Sewer Overflows		x
Sanitary Sewer Overflows		x
Poor In-Stream Water Quality		x
Poorly Maintained Construction Sites		x
Other: _____		
Is there a map that shows the locations of previously reported spills, leaks, sanitary sewer overflows, illicit discharges, or other water quality problems?	Yes	No
		x
*If your answer is **NO**, subtract **1** point*	-1	
Does the Town of Riverhead regularly advertise the phone number, email, address and/or website address that it uses as a stormwater hotline?	Yes	No
	x	
*If your answer is **NO,** subtract **1** point*	0	
Has the Town of Riverhead developed a simple contact database that identifies the local agencies and departments responsible for responding to various hotline reports?	Yes	No
		x
*If your answer is **NO**, subtract **2** points*	-2	
Have all of the local agencies and departments responsible for responding to various hotline reports created standard response plans that outline containment and clean up, safety and waste disposal procedures?	Yes	No
		x
*If your answer is **NO**, subtract **4** points*	-4	
Does the Town of Riverhead provide regular stormwater pollution prevention training and education to employees and contractors involved with hotline response activities?	Yes	No
	x	
*If your answer is **NO**, subtract **1** point*	0	
Subtotal Stormwater Hotline Response *(-10 points possible)*	-7	

Park and Landscape Maintenance Municipal Operations Assessment (MOA)

	9/1/2010
Are there any publicly owned properties greater than one acre in size located within the Town of Riverhead?	Yes: x / No
*If your answer is **YES**, complete the rest of this section*	
Approximately how many of the following publicly owned properties greater than one acre in size are located within the Town of Riverhead?	
Public Parks	14
Public Schools *service separate from Town of Riverhead	15
Public Golf Courses *service separate from Town of Riverhead	
Public Buildings	14
Open Space/Conservation Areas	10
Estimate the approximate percentage (%) of publicly-owned land in the Town of Riverhead	
*If your answer is **> 5%**, subtract **3** points*	-3
Have on-site investigations been conducted on these properties to identify subwatershed restoration opportunities (e.g. pollution prevention, reforestation)?	Yes / No: x
*If your answer is **NO**, subtract **2** points*	-2
Has the Town of Riverhead developed an integrated pest management plan that will help ensure that pesticides are used only as last resort?	Yes / No
If your answer is **NO**, subtract **1** point	-1
Are there procedures in place to help ensure that herbicides, pesticides and fertilizers are properly used on publicly owned properties?	Yes: x / No
*If your answer is **NO**, subtract **1** point*	0
Does the Town of Riverhead use native and naturalized landscaping guidance and plant lists when working on publicly owned properties?	Yes: x / NO
*If your answer is **NO**, subtract **1** point*	0
Are irrigation systems carefully designed to help conserve potable water and provide only the water that plants need to survive	Yes: x / No
*If your answer is **NO**, subtract **1** point*	0
Does the Town of Riverhead provide regular stormwater pollution prevention training and education to employees and contractors involved with park and landscape maintenance activities?	Yes: x / No
*If your answer is **NO**, subtract **1** point*	0
Subtotal Park and Landscape Maintenance *(-10 points possible)*	-6

are we supposed to count schools/golf/parks and open space areas not owned/maintained by the ToR

Residential Stewardship Municipal Operations Analysis (MOA)

	9/1/2010
Has the Town of Riverhead developed any residential stewardship programs to help encourage positive behaviors and discourage negative ones? *If your answer is **YES**, complete the rest of this section* *If your answer is **NO**, subtract **10** points*	**Yes** x **No**
Does the Town of Riverhead have an active storm drain stenciling program? *If your answer is **NO**, subtract **1** point*	**Yes** **No** x -1
Does the Town of Riverhead offer curbside pickup of used automotive fluids and other hazardous household wastes? *If your answer is **NO,** subtract **1** point*	**Yes** **No** x -1
Does the Town of Riverhead collect used automotive fluids and other hazardous household wastes at conveniently located collection centers? *If your answer is **NO**, subtract **1** point*	**Yes** x **No** 0
Does the Town of Riverhead offer free soil testing services to residents to help them determine fertilizing and other lawn care needs? *If your answer is **NO**, subtract **1** point*	**Yes** **No** -1
Does the Town of Riverhead encourage downspout disconnection through the simple distribution of rain barrels and/or the provision of incentives for simple downspout disconnection, rain barrels or rain gardens? *If your answer is **NO**, subtract **2** points*	**Yes** **No** -2
Does the Town of Riverhead encourage tree planting and watershed forestry through the distribution of trees and/or the provision of incentives (e.g. coupons at local nursery)? *If your answer is **NO**, subtract **1** point*	**Yes** **No** x -1
Does the Town of Riverhead regularly advertise its residential stewardship programs? *If your answer is **No,** subtract **2** points*	**Yes** **No** x -2
Does the Town of Riverhead provide regular stormwater pollution prevention and education to employees and contractors involved with its residential stewardship *If your answer is **NO**, subtract **1** point*	**Yes** **No** x -1
Subtotal Residential Stewardship *(-10 points possible)*	-9

Stormwater Management Practice Maintenance Municipal Operations Analysis

	9/1/2010 Yes	No	
Is the Town of Riverhead responsible for the regular upkeep and maintenance of permanent stormwater management practices, including those located on publicly owned lands? *If your answer is **YES**, complete the rest of this section*	x		
Are homeowners associations and/or individual property owners also responsible for the regular upkeep and maintenance of permanent stormwater management practices in the Town of Riverhead? *If your answer is **YES,** please answer the following question*	**Yes** x	**No**	
Has the Town of Riverhead developed a database or other tracking system that identifies the homeowners associations and/or individual property owners responsible for the regular upkeep and maintenance of permanent stormwater management practices in the Town of Riverhead? *If your answer is **NO,** subtract **1** point*	**Yes**	**No** x	-1
What types of permanent stormwater management practices is the Town of Riverhead currently responsible for maintaining?	**Yes**	**No**	
Detention/Extended Detention Ponds	x		
Wet Ponds	x		
Stormwater Wetlands	x		
Bioretention Areas	x		
Filtration Practices	x		
Infiltration Practices	x		
Swales	x		
Proprietary Devices	x		
Is there a map that shows the locations of all of the permanent stormwater management practices that the Town of Riverhead is responsible for maintaining? *If your answer is **NO**, subtract **1** point*	**Yes** x	**No**	0
Has the Town of Riverhead established an inspection and maintenance program under which permanent stormwater management practices are periodically inspected and maintained? *If your answer is **NO**, subtract **4** points*	**Yes**	**No** x	-4
Does the Town of Riverhead have procedures in place for tracking and documenting maintenance activities? *If your answer is **NO**, subtract **1** point*	**Yes**	**No** x	-1
Does the Town of Riverhead have a dedicated funding source, such as an operating budget or stormwater user fee program, for its stormwater management practice maintenance activities? If your answer is NO, subtract 2 points	**Yes**	**No** x	-2
Does the Town of Riverhead provide regular stormwater pollution prevention training and education to employees and contractors involved with stormwater management practice inspection and maintenance activities? If your answer is NO, subtract 1 point	**Yes**	**No** x	-1
Subtotal Stormwater Management Practice Maintenance *(-10 points possible)*			-9

Employee Training Municipal Operations Analysis

	9/1/2010 Yes	No
Does the Town of Riverhead provide regular stormwater pollution prevention training and education to municipal employees and contractors?		
*If your answer is **YES**, complete the rest of this section*	x	
*If your answer is **NO**, subtract 10 points*		

Review the work that you have completed so far and record the subtotals for each municipal operation below:

Hotspot Facility Management	-3
Construct Project Management	-2
Street Repair and Maintenance	-3
Street Sweeping	0
Storm Drain Maintenance	-3
Stormwater Hotline Response	-7
Park and Landscape Maintenance	-6
Residential Stewardship	-9
Stormwater Management Practice Maintenance	-9

Identify the municipal operation that received the lowest score:

Residential Stewardship
Stormwater Management Pract Main.

	Yes	No
For the operation that received the lowest score, does The Town of Riverhead have a simple contact database that identifies all of the employees and contractors involved with that operation	x	
*If your answer is **NO**, subtract **2** points*	0	

	Yes	No
Does the Town of Rivehread provide regular stomrwater pollution prevention training and education to these employees?	x	
If your answer is **No**, subtract **4** points	0	

	Yes	No
Based on the results of employee awareness surveys, have the community's existing training and education programs increased employee's overall awareness about the link between municipal operations and stormwater quality?		
*If your answer is **NO**, subtract **2** points*	x	
	0	

Subtotal Employee Training (-8 points possible)	0

Self Assessment Sheets **Town of Riverhead**

Municipal Operation:

Street Maintenance by the Town Highway Department & B&G for 1.e

1. Status of Policies and Procedures		Est'd	Format (doc)	Latest Review	Content
a	street cleaning priorities				
b	schedules and frequency				
c	priority waterbody considerations (PWL, Section 303(d) List/TMDL, other)				
d	equipment				
e	sidewalks and municipally owned parking lots cleaning				
f	maintenance of unpaved roads (draiange, erosion and dust control)				

IMPLEMENTATION		2010	2011	2012	2013
i	Approximate quantity (tons or CY) of degris cleaned from streets, sidewalks, and parking lots (Cumulative for calendar year)				
ii	Street maintenance staff retraining or continuing education activities related to policies, procedures and stormwater management				
iii	Street maintenance policies and procedures, or BMP updates or revisions				
iv	Erosion control and drainage measures implemented for roads.				

2. Staff		2010	2011	2012	2013
a	Number of staff (with significant roles in municipal operations of reach category)?				
b	Percent to staff receiving training in pollution prevention, good				
c	Percent of staff trained in existing policies and procedures				

3. Equipment		2010	2011	2012	2013
a	Adequacy: are upgrades or new equipment needed?				
b	Proper maintenance scheduels implemented?				

4. Coordination/Collaboration					
a	Are policies consistent across municipal departments?	2010	2011	2012	2013
	i pesticide use in dfferent operations				
	ii recycling				
b	Are County, Regional or State agencies consulted or involved in municipal pollution prevention and good housekeeping efforts?				
c	Are community groups and citizens involved either through volunteer assistance, advisory roles, or outreach and education?				

Self Assessment Sheets Town of Riverhead

Municipal Operation: **Winter Road Maintenance**

1. Status of Policies and Procedures		Established	Format (doc)	Latest Review	Content
a	deicing material storage methods				
b	storage site operations and cleanup				
c	salt reduction options, including alternative materials				
d	improved application technologies				
e	application equipment maintenance				
f	vehicle washing				
g	sensitive ecosystems or priority waterbody considerations (PWL,				
h	drinking water well considerations, including private wells				

IMPLEMENTATION		2010	2011	2012	2013
I	Salt storage structures have been inspected for structural integrity and necessary repairs have been scheduled or completed				
ii	All deicing materials, including salt-sand mixed abraisves, have been stored under permanent or temporary cover.				
iii	Application technology components (spreaders, road-weather systems, etc.) have been tested, calibrated and maintained at manufacturer recommended intervals				
iv	Modified deicing methods (material selection, improved technology, application strategy, training) have resulted in decreased overall annual salt usage accounting for seasonal weather variability . Estimated reduction (tons)				
v	Winter road maintenance staff training or continuing education				
vi	Winter road maintenance policies, procedures or BMP updates or				

2. Staff		2010	2011	2012	2013
a	Number of staff (with significant roles in municipal operations of				
b	Percent to staff receiving training in pollution prevention, good				
c	Percent of staff trained in existing policies and procedures				

3. Equipment		2010	2011	2012	2013
a	Adequacy: are upgrades or new equipment needed?				
b	Proper maintenance scheduels implemented?				

4. Coordination/Collaboration		2010	2011	2012	2013
a	Are policies consistent across municipal departments?				
	i pesticide use in dfferent operations				
	ii recycling				
b	Are County, Regional or State agencies consulted or involved in municipal pollution prevention and good housekeeping efforts?				
c	Are community groups and citizens involved either through volunteer assistance, advisory roles, or outreach and education?				

Self Assessment Sheets **Town of Riverhead**

Municipal Operation: **Stormwater Drainage, Conveyance and Treatment System Maintenance**

1. Status of Policies and Procedures		Established	Format (doc)	Latest Review	Content
a	priority setting for different portions of the system which considers waterbody impacts and other factors (PWL, Section 303(d) List, other)				
b	inspection of system components, and record-keeping and frequency				
c	technology improvements and installation				
d	maintenance, repair and cleanout of system components				
e	prublic education and communications				
f	maintenance of open drainage ditches				

IMPLEMENTATION		2010	2011	2012	2013
i	approximate quantity (tons or CY) of material cleaned from				
ii	length of storm drian pipe cleaned				
iii	number of outfalls cleaned				
iv	updgrades or technology improvements implemented in overall				
v	Stormwater system maintenance staff training or continuing				
vi	Stormwater system maintenance policies, procedures or BMP				
vii	Approximate length of open drainage ditches maintained with enhanced implementation of erosion control practices in ditch (e.g. hydroseeding)				

2. Staff		2010	2011	2012	2013
a	Number of staff (with significant roles in municipal operations of				
b	Percent to staff receiving training in pollution prevention, good				
c	Percent of staff trained in existing policies and procedures				

3. Equipment		2010	2011	2012	2013
a	Adequacy: are upgrades or new equipment needed?				
b	Proper maintenance scheduels implemented?				

4. Coordination/Collaboration		2010	2011	2012	2013
a	Are policies consistent across municipal departments?				
	i pesticide use in dfferent operations				
	ii recycling				
b	Are County, Regional or State agencies consulted or involved in municipal pollution prevention and good housekeeping efforts?				
c	Are community groups and citizens involved either through volunteer assistance, advisory roles, or outreach and education?				

Self Assessment Sheets **Town of Riverhead**

Municipal Operation: **Vehicle and Fleet Maintenance - Municipal Garage & Sewer District**

1. Status of Policies and Procedures		Established	Format (doc)	Latest Review	Content
a	wastewater disposal and treatment from vehicle washing				
b	site drainage system maintenance and cleanout				
c	recycling (including oil and antifreeze)				
d	hazardous materials storage				
e	spill prevention and response (Petroleum and other substances)				
f	soild waste disposal				
g	alternatvie product usage				

IMPLEMENTATION		2010	2011	2012	2013
i	Number of clanouts of oil and grit separators or similar				
ii	Recycling program results:				
	Oil				
	Antifreeze				
	Other (Specify)				
iii	Proper treatement and disposal of wastewater from vehicle washing has been implemented. Number of facilities implemented.				
iv	Fleet maintenance staff training or continuing education activities related to policies, procedures, BMPs and stormwater management.				
v	Vehicle and fleet maintenance policies, procedures or BMP updates or revisions.				

2. Staff		2010	2011	2012	2013
a	Number of staff (with significant roles in municipal operations of				
b	Percent to staff receiving training in pollution prevention, good				
c	Percent of staff trained in existing policies and procedures				

3. Equipment		2010	2011	2012	2013
a	Adequacy: are upgrades or new equipment needed?				
b	Proper maintenance scheduels implemented?				

4. Coordination/Collaboration		2010	2011	2012	2013
a	Are policies consistent across municipal departments?				
	i pesticide use in dfferent operations				
	ii recycling				
b	Are County, Regional or State agencies consulted or involved in municipal pollution prevention and good housekeeping efforts?				
c	Are community groups and citizens involved either through volunteer assistance, advisory roles, or outreach and education?				

Self Assessment Sheets **Town of Riverhead**
Municipal Operation: **Parks Maintenance**

1. Status of Policies and Procedures			Established	Format (doc)	Latest Review	Content
a	Grounds Maintenance					
	i	integrated pest management				
	ii	use of pesticide alternatives				
	iii	fertilizer use, alteranatives and reductions				
	iv	erosion control practices				
	v	solid waste: waste reduction, recycling and litter control				
	vi	hazardous materials sotrage				
	vii	pesticide and ferlizer usage records				
b	Onsite Septic Systems					
	i	inventory of existing systems				
	ii	inspections and record keeping				
	iii	pumpouts and maintenance				

IMPLEMENTATION			2010	2011	2012	2013
i	Grounds Maintenance					
	a	% staff applying pestices whoare NYS Certified Applicators				
	b	Reduction in pesticided usage and/or adoption of alt. post control approaches (less toxic or persistent products, intergrated pest management				
	c	Reduction in fertilizer usage				
ii	Onsite Septic Systems					
	a	Date of most recent inspection (Month/year)				
	b	Date of most recent pumpout (Month/year)				
	c	Documented problems in operation				
iii	Parks maintenance staff training or continuing education activities related to policies, procedures, BMPs and stormwater management					
iv	Park maintenance policies procedures, or BMP Updates or revisions					

2. Staff		2010	2011	2012	2013
a	Number of staff (with significant roles in municipal operations of				
b	Percent to staff receiving training in pollution prevention, good				
c	Percent of staff trained in existing policies and procedures				

3. Equipment		2010	2011	2012	2013
a	Adequacy: are upgrades or new equipment needed?				
b	Proper maintenance scheduels implemented?				

4. Coordination/Collaboration		2010	2011	2012	2013
a	Are policies consistent across municipal departments?				
	i pesticide use in dfferent operations				
	ii recycling				
b	Are County, Regional or State agencies consulted or involved in municipal pollution prevention and good housekeeping efforts?				
c	Are community groups and citizens involved either through volunteer assistance, advisory roles, or outreach and education?				

BMP SUMMARY SHEET	
MS4 Name:	Town of Riverhead
Minimum Control Measure:	3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION
Unique BMP Indentification Number:	
BMP Title	Illicit Discharge Detection and Elimination Plan

Permit Description:

You must develop and implement a program to detect and address non-storm water discharges, including illegal dumping, to your system

BMP Description:

Establish program to detect and reduce illegal and/or improper connections to storm drainage systems and receiving water. The Town will focus on the outfall system inspection. If potential illicit discharges are identified, the specific components listed below will be considered for identification of potential sources. A link will be added to the web site to allow residents or other interested parties to report problems, including illicit discharges or illegal dumping.

Location(s) in SWMP of detailed information relating to this BMP:

	Measurable Goals	2012	2013	2014	2015
1	Number of outfalls inspected annually				
2	Number of septic systems inspected annually				
3	Number of septic systems reported as failing or failed each year.				
4	Number of illegal dumping sites that required reporting to the				
5	TOR/NYSDEC				
6	Number of inspections for illicit discharges annually (Including those conducted with outfall inspections				
7	Creation of database to track outfalls and illicit discharges.				

Timeline/Implementation Schedule

1 Annual inspection program will be reviewed and adjusted as needed on an annual bases

2 Annual illicit discharge inspection will be adjusted at end of 2012 reporting period for effectiveness

3 Database/map will be completed to track outfalls and discharges by end of reporting year 2012

4 Spill response plan will be reviewed and updated by end of reporting year 2012

Specific Components and Notes:

1 Report a Problem email address available on the web site http://riverheadli.com/stormmgmt.html

2 Education materiasl, such as bruchures or web site articles, to illustrate hazards associated with illicit discharges

3 Visual screening of storm water inlets during dry weather conditions, at the time of the outfall inspections

4 Septic system evaulations for property transfers and post-installation

5 Storm drain stenciling opportunity

6 Bi-Annual STOP day for disposal of commonly dumped materials.

7 Dry weaterh flow testing/Dye or smoke testing

8 Video inspections of storm sewers

Responsible Party for this BMP:

Department:	Engineering Department / SMO/GIS
Name:	Christine Fetten, Drew Dillingham, Rob Hubbs
Phone:	631-727-3200-201
E-mail:	fetten@riverheadli.com/dillingham@riverheadli.com/hubbsr@riverheadli.com

Highway Department Personnel as of January 1, 2011

					Training Attendance			
Employee No.	Employee Name	Group Step	Title	Started/ Departed	11/17/08 MCM 6	11/18/08 MCM5	8/10/10 6 MCM's	2/2011
	George Woodson		Highway Superindentant					
	Mark Gadjowski		Deputy Superindentant		1	1	1	
	Ronald Caffrey	12/19	Highway Main Crew Leader				1	
	Walter O'Kula	12/19	Maintenance Mechanic IV		1	1	1	
	Donald Owen	12/16A	Highway Main Crew Leader		1	1	1	
	Jeffrey Davis	9/16A	C.E.O.		1	1	1	
	Benjamin Miller	9/15A	C.E.O.		1	1		
	Edward Reeve	9/15A	C.E.O		1	1	1	
	Michael Zaleski	9/12A	C.E.O		1	1	1	
	Waverly Atkins	9/12	C.E.O			1	1	
	Richard Bates	9/11A	C.E.O		1	1	1	
	John Niewadomski	8/14A	Maintenance Mechanic III			1	1	
	Joseph Quinn	7/15A	H.E.O.		1	1	1	
	William Fink	7/13	H.E.O.		1	1		
	John Apicello	7/11A	H.E.O.		1	1	1	
	Joseph Sheppard	6/19	A.E.O.		1	1	1	
	Kenneth Nagy	6/11	A.E.O.		1	1		
	Michael Smith	6/11	A.E.O.			1	1	
	Arthur Fogal	6/10A	A.E.O.		1	1		
	Gregory Atkinson	6/9A	A.E.O.		1			
	George Mottern	6/9A	A.E.O.		1	1		
	James Pipczynski	6/6	A.E.O.				1	
	Michael Argenti	6/5A	A.E.O.		1	1	1	
	David Arteaga	6/5A	A.E.O.		1	1	1	
	Jarrod Hayes	6/4A	A.E.O.		1		1	
	Christopher Lescenski	6/4A	A.E.O.		1	1	1	
	William Renten Jr.	6/4A	A.E.O.				1	
	Elrod Coach	6/4	A.E.O.		1	1	1	
	Andrew Dick	6/4	A.E.O.		1	1	1	
	Joseph Moreno	6/4	A.E.O.			1		
	Zebedee Williams	6/4	A.E.O.		1	1	1	
	Ray Bouchard	6/4	A.E.O.				1	
	Jeffrey Gibbs	6/P	A.E.O.				1	
	Christopher Bugge	6/P	A.E.O.				1	
	Neil D'Amara	6/P	A.E.O.				1	
	Susan Beal	7/7	Sr. Admin. Assistant					
	Donna Testa	9/10A	Account Clerk Typist					
					63.89%	69.44%	75.00%	

Buildings and Grounds Personnel as of January 1, 2010

					Training Attendance				
Employee No.	Employee Name	Group/Step	Position	Started/ Departed	11/17/08 MCM 6	11/18/08 MCM5	8/10/10 6 MCM's	2/2011	2/2012
	Guy Cawley	15/18	Bldg. Maint. Super				1		
	Gary Hubbard	15/11	Maint. Mechanic V		1		1		
	Steven McKay	12/10A	Grounds Maint. Supervisor				1		
	Robert Hubbard	7/11	Maint. Mechanic II		1				
	Juan Ayala	7/10A	Maint. Mechanic II						
	Henryk Niedzwiecki	7/9A	Maint. Mechanic II				1		
	Scott Sulzer	7/8A	Maint. Mechanic II				1		
	Ricky Mueller	1/13	Maint. Mechanic II						
	David Zebrowski	7/7A	Maint. Mechanic II		1		1		
	Zygmunt Rachubka	7/6A	Maint. Mechanic II				1		
	Joe Ortiz	4/6A	Maint. Mechanic I						
	Gregory Polak	7/P	Maint. Mechanic II				1		
	Madeline Cavaluzi	1/5A	Custodial Worker I						
	Ezra Fife	3/P	Groundskeeper I				1		
					8.33%	0.00%	25.00%		

Water Department Personnel as of January 1, 2010

Training Attendance

Employee No.	Employee Name	Group Step	11/17/08 MCM 6	11/18/08 MCM5	8/10/2010	2/2011	2/2012	2/2013
	Gary Pendzick	20						
	Mark Conklin	25			1			
	Michael Benedict	17/18			1			
	Thomas Kruger	17/18			1			
	Chester Majeski	12/19			1			
	Paul Bokee	15/16						
	Charles Leja	14/15			1			
	Maureen Lynn	11/19						
	John Letson	15/10			1			
	Arnold Wulffraat	15/9A						
	Jason Hubbard	15/8A			1			
	Lynn Barauskas	9/19						
	Brian Gablenz	15/5A						
	John Kellar	15/5A			1			
	Frank Walls	7/5A			1			
	James Schunk	7/4			1			
	Alan Hatcher	7/4			1			

68.75%

Sewer Department Personnel as of January 1, 2010

					Training Attendance					
Employee No.	Employee Name	Group Step	Title	Date Started/ Departed	11/17/08 MCM 6	11/18/08 MCM5	9/1/2010	2/2011	2/2012	2/2013
	Michael Reichel		License Stipend				1			
	Timothy Allen		Assistant Wastewater Dist.							
	Richard Bokinz	16/19	Sr Wastewater Tmt Plt Oper II		1		1			
	Matthew Hattorff	17/18	WW Tmt Plant Oper 3A		1		1			
	Lindsay Reeve	16/18	Sr Wastewater Tmt Plt Oper II			1				
	Michael Lech	17/12A	WW Tmt Plant Oper 3A							
	Warren Alexander	14/11A	Wastewater Tmt Plant Oper II				1			
	John Arrigo	14/10	Wastewater Tmt Plant Oper II				1			
	Douglas Attridge	14/9	Wastewater Tmt Plant Oper II		1		1			
	Glenn Magee	7/13A	Maintenance Mechanic II							
	Christopher Schroeher	8/11A	Maintenance Mechanic III				1			
	Robert Helupka	14/5A	Wastewater Tmt Plant Oper II							
	Michael Maffia	8/9	Maintenance Mechanic III		1					
	Jill Sollazzo	9/8A	Account Clerk Typist							
	Robert Smith	7/P	Maintenance Mechanic II				1			
	Robert Obie	50	P/T Clerk							
					25.00%	6.25%	50.00%			

Sanitation Department Personnel as of January 1, 2010

					Training Attendance			
Employee No.	Employee Name	Group Step	Title	Date Started/ Departed	11/17/08 MCM 6	11/18/08 MCM5	8/10/2010	2/2011
	John Reeve						1	
	Gina Chew						1	
	Ronald Darling	6/7A	AEO				1	
	James Clarkin	3/9A	Laborer					
	Brett Kurz	3/6A	Laborer				1	
	Victoria Cain	71	Guard-Landfill					
	Ricky Muller-PT	71	Guard-Landfill					
	Janice McKenna-PT	71	Guard-Landfill					
	Henryk Niedzweicki-PT	71	Guard-Landfill				1	

62.50%

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
1	9	2008	UNL	1GNDT135482175063	1	4.2L 4X4 SUV	CHEVY-GARY	TRAILBLZR	WTR	WHITE	20111101	M32466
2	9	2000	UNL	1GCGK24R7YR211555	2	5.7-255HP-8.6GW	CHEVY-CHET	K2500-WTR	WTR	WHITE	20110817	L14970
4	9	2002	DSL	1GBJC34122E104547	4	6.6-300HP-11.GW	CHEVROLET	3500-WTR	WTR	WHITE	20120206	K16566
5	9	2008	UNL	1GCC5149788168849	5	2.9L PICKUP	CHEVROLET	COLORA-WTR	P/U	WHITE	20111107	M32467
6	9	2003	UNL	1GCJK341X3E112444	6	6.6-300HP-11.4G	CHEVROLET	K3500-WTR	DUMP	WHITE	20110808	K37868
9	9	2002	DSL	1GBJC34132E106288	9	6.6-300HP-11.GW	CHEVROLET	3500-WTR	WTR	WHITE	20120209	K16561
11	9	2006	UNL	1GCHK29U96E116842	11	6.0-300HP-9.2GW	CHEVY-CHUK	2500HD-WTR	CHUK	WHITE	20110909	L94387
12	9	2001	UNL	1GCEC14V11Z244018	12	4.8L-SILVERADO	CHEVROLET	1500-WTR	WTR.	WHITE	20110404	K20042
13	6	2008	DSL	52974	13	4X4 TRACTOR	KUBOTA	M6040HDC	LOAD	ORANG	0	NONE
16	3	2003	DSL	1HTGEAHR63H560428	HWY 16	CUMNS/288HP	INTERNAT'L	2500-AUTO	8YD	ORANG	20111028	L77122
17	1	1999	UNL	AM70036H999	317	RESCUE BOAT-2/1	AMBAR-BOAT	AM700-22'	COPE	GREY	0	NONE
19	9	2001	DSL	LB75B-699300700	19	BACKHOE	NEWHOLLAND	LB75B-WTR	WTR	YELOW	0	NONE
20	8	2002	UNL	4FVCABTA1YU308858	20	AIR COMPRESSOR	JOHN DEERE	COMPRESSOR			0	NONE
21	8	2000	UNL	1GCGK29U3YE278321	21	6.0-300HP-8.6GW	CHEVY-MIKE	SLVR-K2500	MIKE	WHITE	20110523	L14987
22	8	2002	DSL	1FVABWAKX2HK41610	22	7.2L CAT/246HP	FREIGHTLIN	FL80-SWR	SWR	WHITE	20110503	K28215
23	8	2003	UNL	1GCHK24UO3E196003	23	6.0-300HP-8.6GW	CHEVROLET	2500-SWR	SWR	WHITE	20120203	L76011
25	3	1999	UNL	4KNUT1626XL162237	HWY 25	4 WHEEL TRAILER	TOWMASTER	T-10DD	HWY	BLACK	20120403	L14967
28	8	2007	DSL	1FDAF57P17EB19767	28	6.0-17950GW	FORD-SEWER	F550 4X4	DUMP	WHITE	20111201	M20140
29	3	1992	UNL	4006	HWY 29	ASPHALT HAULER	POWERAY-WR	4TSU	HTBX	YELOW	0	L76841
30	8	2002	UNL	1GCHG35R421204997	30	5.7-255HP-9.GW	CHEVY-3500	EXPRES-SWR	MATT	WHITE	20120206	K29850
31	10	2003	UNL	1FAFP58203A245300	31	3.0L WAGON	FORD-LORI	TAURUS	LORI	WHITE	20110603	L70925
33	71	1997	UNL	1GNDT13W8VK179504	33	UNMARK-4.3L	CHEVROLET	BLAZER	4X4	WHITE	20110602	K28213
34	78	1997	UNL	2FALP71W4VX153192	34	UNMARK-4.6L	FORD-REC	CN VICT	REC	WHITE	20110601	K28231
35	84	1999	UNL	2FAFP71W3XX199225	35	UNMARK-4.6L EFI	FORD-NICOL	CN VICT	CODE	WHITE	20110729	L76835
36	72	2004	UNL	2FAHP71W64X100319	36	UNMARK-4.6L	FORD-COUR	CN VICT	COUR	WHITE	20120202	L71560
37	3	2003	DSL	3.06272E+13	HWY 37	TORO MOWER	TORO	GRNDSMASTR	MOWR	RD/WH	0	NONE
38	75	2008	UNL	1GCDT14EX88219386	38	3.7L-JACK	CHEVY-JACK	COLORADO	BLDN	WHITE	20110602	M39775
39	73	2008	DSL	1FD3E35P58DA39477	39	6.0L-12PASS	FORD/BUS	E350-8740G	BUS	WHITE	20120209	M33319
40	74	2005	UNL	1FTYR10U25PA56179	40	3.0L-MEALS	FORD-MEALS	RANGER	MEAL	WHITE	20110818	L90498
41	78	1998	DSL	1HVBEABMOWH548763	41	7.3-190HP-21GW	INTERNATL	3400/REC	33PA	WHITE	20120217	L14976
42	74	2005	UNL	1FTYR10U75PB02010	42	3.0L-MEALS	FORD-MEALS	RANGER	MEAL	WHITE	20110926	L90499
43	59	1987	UNL	1GCCG15H7H7181887	43	5.0L-TBI	CHEVROLET	G10-CHORE	CHOR	WHITE	20110523	L70672
44	74	2000	DSL	1FDXE45F6YHB31527	44	7.3-20P-14050GW	FORD-NUTRA	E450	BUS	WHITE	20110426	K16395
45	75	2004	UNL	1GCEK19V94E254190	45	4.8L-POD	CHEVY-POD	SILVERADO	BLDN	WHITE	20120206	L71593
46	74	2005	UNL	1C4GP45RX5B360400	46	3.3L V6-VAN	DODGE	CARAVAN-SR	NUTR	WHITE	20110503	L98608
47	75	2004	UNL	1GCEK19VX4E251508	47	4.8L-SHARON	CHEVY-SHRN	SILVERADO	BLDN	WHITE	20120201	L71590

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
48	75	2008	UNL	1GCDT14E088215816	48	3.7L-RICH	CHEVY-RICH	COLORADO	BLDN	WHITE	20110516	M39753
49	78	2003	UNL	2FAFPT1W33X118234	49	UNMARK-4.6L	FORD-REC	CN VICT	REC	WHITE	20110518	K29887
50	6	2008	UNL	1FDAF57R78EC84158	50	6.4L DIESEL	FORD-B&G	F550	DUMP	WHITE	20120113	M23481
51	74	2008	DSL	1FD4E45P88DA42786	51	6.8L-20PASS	FORD-NUTRA	E450-9540G	BUS	WHITE	20120327	M33320
52	6	2006	DSL	1FDAW56P66EB07114	52	6.0L DIESEL	FORD-B&G	F550	UTLY	WH/BK	20111020	L94918
53	6	2002	UNL	1GBJK34U12E207617	53	6.0-300HP-12GW	CHEVROLET	SILVER-B&G	B&G	WHITE	20110620	K29860
54	6	2000	UNL	1GCGK24R7YR210938	54	5.7-255HP-8.6GW	CHEVROLET	K2500-B&G	B&G	WHITE	20110604	L15026
56	80	1999	UNL	3B7KF26Z4XM590039	56	5.9-240HP-8.8GW	DODGE-DOG	RAM 2500	DOG	WHITE	20110803	L14985
57	77	2002	UNL	1GCHK24U62E235644	57	6.0-300HP-9.6GW	CHEVY-SANI	2500HD	YARD	WHITE	20120404	K28434
58	6	2005	UNL	1GCHK29U75E326239	58	6.0-300HP-9.2GW	CHEVROLET	2500HD-B&G	B&G	WHITE	20110503	L90474
59	74	2000	DSL	1FDXE45F4YHB31526	59	7.3-14P-14050GW	FORD-NUTRA	E450	BUS	WHITE	20110428	K16396
60	40	2010	UNL	1FTNE2EL6ADA51017	60	FORD E250 VAN	FORD-LITE	E250	LITE	WHITE	20110414	M57540
61	3	1985	UNL	1C9BT2222F1193615	HWY 61	4 WHL-W/BRK-TRL	CENTERVILL	TRAILER	TRLR	YELOW	20120201	L14956
64	75	1997	UNL	1GNDT13W6VK178187	64	UNMARK-4.3-190H	CHEVROLET	BLAZER	BLDN	WHITE	20110501	L43694
65	74	2000	DSL	1FDXE45F1YHB34500	65	7.3-20P-14050GW	FORD-NUTRA	E450	BUS	WHITE	20120316	K16394
66	77	2008	DSL	1HTWAAAR58J656195	66	DT466-245HP	INTERNAT'L	7300-SANI	PACK	WHITE	20111206	M32471
68	83	2004	UNL	1GCEK19V54E254588	68	4.8L-6400GVW	CHEVY-DAVE	SILVERADO	FIRE	WHITE	20120203	L71592
69	77	2008	UNL	1FTWF31578EE40414	69	5.4L-10100GVW	FORD-REEVE	F350-SANI	JR	WHITE	20110701	M40267
70	3	1991	DSL	1HSHKG2R7MH354971	HWY 70	NTC315-CUMN-315	INTERNAT'L	8300	TRAC	ORANG	20110608	K28472
71	3	1996	UNL	4053	HWY 71	ASPHALT HAULER	POWERAY	4TSU	HTBX	YELOW	0	C50505
72	3	2002	DSL	L70310866	HWY 72	PAYLOADER 4X4	HYUNDAI	HL740-3AE	LODR	YELOW	0	L77102
73	9	2008	UNL	1GCEK14C78Z298399	73	4.8L-WTR	CHEVY-CONK	SILVERADO	MARK	WHITE	20110719	M40250
74	9	1998	UNL	1GCGK24RXWZ229612	74	5.7-255HP-8.6GW	CHEVROLET	K2500-WTR	WTR	WHITE	20110615	L14991
76	9	2005	UNL	1GCHK29U45E264332	76	6.0-300HP-9.2GW	CHEVY-TOM	2500HD-WTR	TOM	WHITE	20110504	L86111
77	9	2006	UNL	1GCGG25V961249779	77	4.8L-2500VAN	CHEVROLET	EXPRES-WTR	WTR	WHITE	20110610	M12932
78	78	2001	UNL	2FAFP71W71X196397	78	UNMARK-RECREATI	FORD-REC	CN VICT	REC	WHITE	20110926	K16419
79	79	2001	UNL	1GNEK13TX1J182174	79	5.3L 4X4	CHEVROLET	TAHOE-DREW	DREW	WHITE	20110812	L90459
81	9	2008	UNL	1GCDT14E188168635	81	3.7L 4X4	CHEVROLET	COLORA-WTR	P/U	WHITE	20111107	M32472
82	74	2007	UNL	2FAHP71W87X134380	82	4.6L-NUTRITION	FORD-NUTRA	CN VICT	NUTR	WHITE	20111028	M20724
83	75	2008	UNL	1GCDT14E788214968	83	3.7L-MARK	CHEVY-MARK	COLORADO	BLDN	WHITE	20110602	M33346
84	78	1999	UNL	2FAFP71W8XX199222	84	UNMARK-4.6L	FORD-REC	CN VICT	REC	WHITE	20110922	L55572
85	78	2009	UNL	1FTSW215X9EB12298	85	5.4L-9000GVW	FORD-REC	F250-CREW	REC	WHITE	20110420	M50480
87	6	1998	UNL	1GTGK24R9WE542660	87	5.7-255HP-8.6GW	GMC-JOE	K2500-B&G	JOE	RED	20120113	L15040
89	3	2001	DSL	514449799	HWY 89	2001 BOBCAT	BOBCAT	LOADER	LOAD	WHITE	0	NONE
90	74	2000	UNL	1GCCS195448249586	90	2.2L-MEALS	CHEVY-MEAL	S10	MEAL	RED	20110606	M64685
91	84	2007	UNL	2FAHP71WX7X134381	91	UNMARK-4.6L-EFI	FORD-DOWNS	CN VICT	CODE	WHITE	20110711	M20725

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
92	79	2001	UNL	1GNEK13V01J294631	92	4.8-275HP	CHEVROLET	TAHOE-KEN	KEN	WHITE	20110509	K16535
94	6	2000	UNL	1GCGK24R3YR168638	94	5.7L-4X4-PLOW	CHEVY-B&G	K2500-B&G	B&G	WHITE	20110405	L14988
96	40	2006	DSL	1GDE5C1236F433354	96	6.6L-2WD	GMC-LITE	C5500-LITE	BUCK	WHITE	20110506	M20718
97	3	2004	DSL	1HTWDAAR04J079769	HWY 97	DT466/260HP	INTERNAT'L	7400-AUTO	6YD	ORANG	20110923	L71523
98	60	1999	UNL	2FAFP71W6XX199980	98	INTERNS-4.6L	FORD-INTRN	CV-INTERNS	INTR	WHITE	20110722	L43651
100	8	2002	UNL	5ASAG27462F020284	GEM 1	ELEC GEM CAR	CHRYSLER	GEM	ELEC	GREY	0	18047LU
101	1	2007	UNL	2FAHP71W87X134377	101	MARKED-4.6L	FORD-627	CN VICT	627	WHITE	20120201	627
102	1	2011	UNL	2FABP7BV6BX135838	102	MARKED-4.6L-EFI	FORD-603	CN VICT	603	WHITE	20120402	603
103	1	2008	UNL	2FAHP71V18X162594	103	MARKED-4.6L-EFI	FORD-HP1	CN VICT	HP1	WHITE	20110516	HP1
104	1	2008	UNL	2FAHP71V18X164135	104	MARKED-4.6L	FORD-622	CN VICT	622	WHITE	20110713	622
105	1	2009	UNL	2FAHP71V79X148412	105	MARKED-4.6L-EFI	FORD-JOHNY	CN VICT	K9-2	WHITE	20110818	K9-2
106	1	2008	UNL	2FAHP71V38X164136	106	MARKED-4.6L	FORD	CN VICT		WHITE	20110721	0
107	1	2011	UNL	2FABP7BV8BX135839	107	MARKED-4.6L	FORD-604	CN VICT	604	WHITE	20110923	604
108	1	2009	UNL	2FAHP71VX9X128025	108	MARKED-4.6L-EFI	FORD-606	CN VICT	606	WHITE	20111202	606
109	1	2005	UNL	2FAHP71W55X126749	109	MARKED-4.6L-EFI	FORD-621	CN VICT	621	WHITE	20110713	621
110	1	2003	UNL	2FAFP71W63X118230	110	MARKED-4.6L-EFI	FORD-JACK	CN VICT	K9-1	WHITE	20110824	K9-1
111	1	2009	UNL	2FAHP71V69X128023	111	MARKED-4.6L-EFI	FORD-607	CN VICT	607	WHITE	20120113	607
112	1	2007	UNL	2FAHP71WX7X134378	112	MARKED-4.6L	FORD-LPR	CN VICT	LPR	WHITE	20120308	HP2
113	1	2008	UNL	2FAHP71V58X164137	113	MARKED-4.6L	FORD-601	CN VICT	601	WHITE	20111109	601
114	1	2008	UNL	2FAHP71V78X164138	114	MARKED-4.6L-EFI	FORD-620	CN VICT	620	WHITE	20111110	620
115	1	2004	UNL	2FAHP71W54X100327	115	MARKED-4.6L-EFI	FORD-HQ	CN VICT	HQ	WHITE	20110407	HQ
116	1	2005	UNL	2FAHP71W15X126750	116	MARKED-4.6L	FORD-623	CN VICT	623	WHITE	20110713	623
117	1	2005	UNL	1FMPU16535LA66393	117	5.4L-300HP	FORD-COPE1	EXPEDITION	COPE	WHITE	20120203	COPE 1
118	1	2008	UNL	2FAHP71V98X164139	118	MARKED 4.6L	FORD-602	CN VICT	602	WHITE	20111223	602
119	1	2009	UNL	2FAHP71V99X148413	119	MARKED 4.6L	FORD-605	CN VICT	605	WHITE	20120326	605
120	3	2003	DSL	1HTGEAHR43H560427	HWY 12	CUMNS/288HP	INTERNAT'L	2500-AUTO	8YD	ORANG	20110920	L77123
121	1	2001	UNL	2FAFP71W51X196396	121	MARKED-4.6L	FORD	CROWN VIC		WHITE	0	
172	83	2004	UNL	1GCEK19V14E254474	72	4.8L-6400GVW	CHEVY-CRAG	SILVERADO	FIRE	WHITE	20120201	L71591
189	78	1999	UNL	2FAFP71W3XX199984	89	UNMARK-4.6L-EFI	FORD-RAY	CN VIC-REC	REC	WHITE	20110601	L43674
200	8	2002	UNL	5ASAG27432F018251	GEM 2	ELEC GEM CAR	CHRYSLER	GEM	ELEC	GREY	0	18048LU
201	1	1999	UNL	2FAFP74WOXX175251	201	BLACK-4.6L-EFI	FORD-BLACK	CN VICT	COPE	BLACK	20120403	AKX6836
202	75	2004	UNL	2FAHP71W44X100111	202	GREY-4.6L EFI	FORD-LROY	CN VICT	LROY	GREY	20110512	CNY8492
203	1	2001	UNL	2FAFP71W11X196394	203	UNMARK-4.6L-EFI	FORD-PEEKR	CN VICT	LIEU	WHITE	20110617	BAE8586
204	1	2005	UNL	1FAFP53225A222711	204	3.0L-UNMARKED	FORD-JOE	TAURUS SE	JOE	RED	20120201	L56199
205	1	2007	UNL	SFAHP71W37X134433	205	BLACK-4.6L	FORD-SUPR	CN VICT	SUPR	BLACK	20120209	M20721
207	1	2004	UNL	2FAHP71W64X100112	207	BLUE-4.6L EFI	FORD-HALEY	CV-BLUE	DET	BLUE	20110706	CNY8493

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
208	1	2002	UNL	2FAFP71W82X131799	208	SPRUCE GREEN	FORD-JAB	CN VICT	JAB	GREEN	20120201	L71553
209	1	2005	UNL	2FAHP71W85X126728	209	4.6-BLUE SPOT	FORD-WASKI	CV SPOTLIT	SPOT	BLUE	20120302	L85729
210	1	2002	UNL	2FAFP71WX2X131786	210	BLACK-4.6L-EFI	FORD-BLACK	CN VICT	COPE	BLACK	20110517	BEG4854
211	1	1996	UNL	1G2HX52K4T4252412	211	BLACK-3.8L	PONTIAC	BONNEVILLE	PD	BLACK	20111026	Z820EA
212	72	2005	UNL	1FAFP53245A222709	212	3.0L RED	FORD-POOL	TAURUS SE	POOL	RED	20120104	L90475
215	1	2004	UNL	2FAHP71W64X100224	215	GREY-4.6L EFI	FORD-DET	CV-GREY	DET	GREY	20110804	L71554
216	1	1998	UNL	2FAFP72W0WX150643	216	DARK GREEN-4.6L	FORD-GREEN	CN VICT	COPE	GREEN	20120405	T765ME
217	1	1993	UNL	2FALP74W1PX192191	217	BLACK-4.6L-EFI	FORD-SHOP	CN VICT	PD	BLACK	20110908	CKK3929
218	1	2009	UNL	2B3KA43V69H637215	218	GREY-3.5L-245HP	DODGE-CHEF	CHARGER	CHEF	GREY	20110926	M50493
219	1	1999	UNL	2FAFP71W5XX199985	219	UNMARK-4.6L-EFI	FORD-DAVE	CN VICT	LIEU	WHITE	20110415	DY352B
220	1	2009	UNL	2B3KA43V89H637216	220	BLACK-3.5L-245H	DODGE-CAPT	CHARGER	CAPT	BLACK	20110916	M50495
221	3	1996	DSL	1M2K191C5TM008543	HWY 121	10WHEL SNOFIGHT	MACK	MR688S	SPDR	ORANG	20120315	M57525
222	3	2003	DSL	1HTGEAHR03H560425	HWY 101	CUMNS/288HP	INTERNAT'L	2500-AUTO	8YD	ORANG	20110429	L77124
223	3	1996	DSL	JEE0051994	HWY 120	1996 PAYLOADER	CASE	PAYLOADER		ORANG	0	M57523
224	3	1996	DSL	1M2K191C2TM008547	HWY 122	10WHEL SNOFIGHT	MACK	MR688S	SPDR	ORANG	20120313	M57524
225	3	1996	DSL	1M2K191C9TM008531	HWY 123	10WHEL SNOFIGHT	MACK	MR688S	SPDR	ORANG	20120313	M57522
226	3	1991	DSL	1FDNK64P2MVA00161	HWY 124	6.6L DSL.	FORD-DUMP	F600	DUMP	ORANG	20110728	M64666
227	3	2004	DSL	1J9VM4L314012019	HWY 125	5.9L-SWEEPER	JOHNSTON	RD/S	SWEP	WHITE	0	M64670
228	3	2004	DSL	1J9VM4L324C172014	HWY 126	5.9L-SWEEPER	JOHNSTON	RD/S	SWEP	WHITE	0	M64671
229	3	2008	DSL	MOD-928705 SER-09080958	HWY 83	MOWER	HUSTLER	SHIBAURA	MOWR	YELOW	0	
230	3	1994	DSL	1FDNK74C8RVA33918	HWY 127	5.9L-CUMIN 275H	FORD	F700 DUMP	PLOW	ORANG	0	M64734
231	3	1998	DSL	1FV3GFAC7WH967157	HWY 128	5.9L-SAFETY	FREIGHLINE	FL60	SAFT	YELOW	20110926	M64733
239	3	1988	UNL	1120TL104JS030005	HWY 39	2WHEEL-7300GVW	EAGER BEVR	TRAILER-WR	TRLR	YELOW	20111201	L15032
242	3	2003	DSL	1281081	HWY 42	TRACTOR/MOWER	NEWHOLLAND	TN65D	MOWR	BLUE	0	NONE
253	3	1987	DSL	4290004U004156	HWY 5	CRAWLER LOADER	DRESSER	175C	LODR	YELOW	0	NONE
256	1	1980	UNL	STRE2557109F0	PD 309	16'-ALUMINUM	STARCRAFT	BOAT	BOAT	WHITE	0	NONE
259	82	1989	UNL	HSX96637D989	313	25'-BOAT	HYDRA SPOR	WALK AROUN	BOAT	GRAY	0	NONE
260	1	1987	UNL	GBM42188B787	314	12'-ALUMINUM	GRUMMAN	CARTOPPER	BOAT	GREY	0	NONE
261	1	1981	DSL	1FDYD80UOBVK10871	310	COMMAND UNIT	FORD	8000	CMAN	WHITE	0	MCP-1
281	1	1993	UNL	UC	UC 281	UC '93 BUICK	BUICK				0	
282	1	1996	UNL	UC	UC 282	UC '96 PONTIA	PONTIAC				0	
283	1	1999	UNL	UC	UC 283	UC '99 MERCURY	MERCURY				0	
284	1	1999	UNL	UC	UC 284	UC '99 GMC	GMC				0	
285	1	2000	UNL	UC	UC 285	UC '00 PONTIAC	PONTIAC				0	
286	1	1996	UNL	UC	UC 286	UC '96 3L 12VAL	INFINITI	I-30T		WHITE	0	
287	1	2004	UNL	UC	UC 287	UC '04 GMC SIER	GMC	SIERRA		GREEN	20111102	UC

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
288	1	1996	UNL	UC	UC 288	UC '96 5.2L	JEEP	GRND CHERO		BLACK	20111107	FAR1754
289	1	1998	UNL	UC	UC 289	UC '98 LINCOLN	LINCOLN	NAVIGATOR		BLACK	0	
290	1	1999	UNL	2FAFP71W7XX199227	290	UNMARK-4.6L-EFI	FORD-RICK	CN VICT	LIEU	WHITE	20110706	BAE8588
291	1	2004	UNL	2FAHP71W84X100113	291	4.6L UNDERCOVER	FORD	CN VICT	COPE	WHITE	20111008	CNY8494
293	1	1999	UNL	2FAFP71WXXX199982	293	4.6L TRAF CONT	FORD-TCO	CN VICT	PD	WHITE	20110803	TCO
294	1	2003	UNL	2FAFP71W83X118231	294	4.6 TRAFIC CNTR	FORD-TCO2	CN VICT	TCO2	WHITE	20110606	TCO
295	1	1995	UNL	NY56844	295	UC '95 NISSAN 3	NISSAN	MAXIMA	PD	GREEN	20120107	BMY2916
297	1	2000	UNL	JA4MT31H6YP047481	297	UC '00 MITSUBIS	MITSUBISHI	MONTRO/SPT	COPE	BK/GR	20120111	CXX3296
301	1	2007	UNL	1FMFU16527LA62737	301	5.4L-300HP	FORD-COPE3	EXPEDITION	COPE	WHITE	20110613	COPE 3
302	1	2009	UNL	1FMFU16579LA00253	302	5.4L-300HP	FORD	EXPEDITION		WHITE	20110512	
303	3	2000	DSL	1FV6JJBB3YHG08837	HWY 3	7.2-3126-230	FREIGHTLIN	FL80-AUTO	8 YD	ORANG	20110728	L14933
304	3	2003	DSL	1HTGEAHR23H560426	HWY 4	CUMNS/288HP	INTERNAT'L	2500-AUTO	8YD	ORANG	20110907	L77120
305	1	2000	UNL	1GCGK29U5YE402170	305	6.0-300HP-8.6GW	CHEVROLET	2500-U2	P/U	WHITE	20110701	U-2
306	3	1956	UNL	B27502	HWY 106	4WD SNO FIGHTER	WALTERS	SNO FIGHTR	SNOW	YELOW	0	M23556
307	82	2005	UNL	1GCHK29U65E321937	307	6.L-300HP-8.6GW	CHEVROLET	2500HD-BAY	BAY	WHITE	20110603	M-1
308	1	1987	UNL	2GBHG31KXH4144738	308	5.7L VAN	CHEVROLET	G30	PROP	WHITE	0	K37871
309	1	2009	UNL	1FTSW21519EA50757	309	5.4L-300HP-9KGW	FORD-U1	F250-CREW	U-1	WHITE	20110503	U1
310	3	1988	DSL	1A9A24DBXJR059043	HWY 10	8.2-DETR-170HP	MOBILE-WR	2TE4-M8	SWEP	ORANG	0	L14951
311	3	2000	DSL	1A9M24DB0YR059005	HWY 11	7.3 INT./T444E	MOBILE-M8A	PATRIOT	SWEP	YELLO	0	L14972
312	80	2005	UNL	1FTNF21595EB39967	312	5.4L-8.6GW-4X4	FORD-DOG	F250	DOG	WHITE	20120207	L56197
313	1	2011	UNL	1GNSK2E09BR261074	304	5.3L-330HP	CHEVY-625	TAHOE	625	WHITE	20120302	625
315	1	2005	UNL	1FMPU16515LA66392	315	5.4L-300HP	FORD-CIRT	EXPEDITION	CIRT	WHITE	20120203	CIRT
316	1	2001	UNL	1GNEK13V91J294045	316	4.8-275HP	CHEV-COPE2	TAHOE-COPE	COPE	WHITE	20110804	COPE 2
318	1	2004	UNL	UCF08328J304	318	PUMP-OUT BOAT	N COAST 24	PUMP-OUT	BOAT	WHITE	0	NY3349FF
319	3	2012	DSL	224001527	HWY 19	SKID LOADR-TRAC	TAKEUSHI	TL240	LOAD		0	R24461
320	3	2000	DSL	SE210W2AGBY0390	HWY 20	5.9L CUMMINS	SAMSUNG	SE210-W2A	HOE	ORANG	0	L15023
321	82	2009	UNL	PXM65060D909	321	YAMAHA 200HP	PARKER	2520XLD	BOAT	WHITE	0	BOAT
322	1	1996	DSL	1FV3EFBC2TL857517	322	B5.9L-13100GVM	FREIGHTLIN	FL50	322	WHITE	20110518	ERU
323	3	1980	DSL	2230153B100534X	HWY 23	TRACTOR MOWER	INTERNAT'L	I-240PL	MOWR	YELOW	0	NONE
324	1	2011	UNL	UCF83103L011	324	PUMP-OUT BOAT	N COAST 23	PUMP-OUT	BOAT	WHITE	0	
328	77	1989	DSL	1HTLDTVN6KH626148	32	DT466-185HP	INTERNAT'L	S1954-SANI	PACK	WHITE	20120308	L14966
329	3	2005	UNL	T4PR052810354	HWY 29B	ASPHALT HAULER	SPAULDING	RMV	HTBX	YELOW	0	
330	3	1956	DSL	148814	HWY 35	734CI-220HP	WALTER	ACBL	PLOW	ORANG	0	L14935
331	3	1998	DSL	1HTSCAAP2WH501955	HWY 36	DT466E-225HP	INTERNAT'L	4700-AUTO	SWEP	WHITE	20120305	L14968
333	3	1982	DSL	1.3079E+11	HWY 38	4219DF-01 DIESE	INGERSOLL	185	COMP	CREAM	0	NONE
336	3	2000	DSL	A75313	HWY 43	2.25 YD-PAYLOAD	KOMATSU	WA250-3PT	LODR	YELOW	0	K29866

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
337	3	2000	DSL	1FDXF46F2YED34489	HWY 44B	7.3L-BUCKET	FORD	F450	TREE	WHITE	20110627	K20067
340	70	1991	UNL	1FDKF37HXMNA73188	MG 48	5.8L-11.K GVW	FORD-MG	F350	SHOP	ORANG	20110518	K81507
342	3	1992	DSL	1HF02637	HWY 50	50HP-PAYLOADER	CAT 3204	IT28B	LODR	YELOW	0	NONE
343	3	1999	DSL	1FV6JJBB1XHB30240	HWY 51	7.2-3126CAT-230	FREIGHTLIN	FL80-AUTO	8 YD	ORANG	20110518	L14981
344	3	1987	UNL	000B01975O	HWY 52	TRACTOR W/BOOM	CASE	585	MOWR	RED	0	L14950
345	3	2003	DSL	1HTGEAHR83H560429	HWY 53	CUMNS/288HP	INTERNAT'L	2500-AUTO	8YD	ORANG	20110517	L77121
346	3	2005	DSL	1HTWDAAR75J080340	HWY 56	DT466/260HP	INTERNAT'L	7400SFA	6YD	OR/BK	20111114	L56178
347	3	1998	DSL	1M2K191C8WM011165	HWY 118	10WHEL SNOFIGHT	MACK	MR688S	SPDR	ORANG	20111005	
348	3	1994	UNL	1FDNK74C8RVA33921	HWY 58	SAFETY TRUCK	FORD	F700	SAFT	YELOW	0	R24460
349	3	2000	DSL	JR2212A6477J02	HWY 55	4.5L-4045 POWER	TARCO-VAC	BIG-T-VAC	LEAF	YELOW	0	D14761
351	3	1989	DSL	87V09055	HWY 63	ROAD GRADER	CATERPILLA	120G	GRDR	YELOW	0	L14948
352	3	1986	DSL	1GBHD34J3GF425820	HWY 64	6.2L UTILITY	CHEVY-MIKE	M998	SHOP	YELOW	0	ARMY
353	3	1991	DSL	1M2P264CXMM008438	HWY 66	MACK ROLL-OFF	MACK	RD690S	HWY	WHITE	20111007	L25901
354	3	1986	UNL	SN3955	HWY 54	HOT BOX	POWERAY	4TSU	HTBX	ORANG	0	L76846
355	3	1985	DSL	50857	HWY 67	MOWER / SIDEWLK	TORO	GROUNDSMAS			0	NONE
356	3	1985	UNL	1AWC00116F4000438	HWY 68	6CYL.FORD	WHISPER	CHIPPER	CHIP	ORANG	0	A18641
357	3	2002	UNL	5ASAG27412F019348	HWY 103	GEM CAR FOR HWY	CHRYSLER	GEM	SHOP	WH/RE	0	18448LU
360	3	1988	DSL	1HTZPGJT5JH568772	HWY 73	LT10-CUMN-285HP	INTERNAT'L	2574	14YD	ORANG	20110920	L15033
361	3	1991	UNL	11493	HWY 74	SHOP WAGON	MB245	FLATBED	4WH	YELOW	0	NONE
364	3	2008	DSL	60C35007	HWY 76	KAWASAKI PAYLOA	KAWASAKI	KSS60ZR2	6CYL	YELOW	0	PAYLOADER
365	3	1985	UNL	1VRC111A6F1001101	HWY 77	6CYL.FORD	VERMEER	1600	CHIP	YELOW	0	A18642
368	3	1978	UNL	1780263	HWY 84	SIDEWALK PLOW	BOMBARDIER	SW48FA			0	L14937
369	3	1981	DSL	89492	HWY 85	TRACTOR LOADER	FORD/MOWER	445	MOWR	YELOW	0	NONE
376	3	1992	DSL	1HTGEAYR9NH461282	HWY 26	L10-CUMN-260HP	INTERNAT'L	2574-AUTO	7YD	ORANG	20120307	L15030
377	3	1983	DSL	ZC3453704D3400XA7	HWY 47	WHITE-D3400	GIANT-VAC	LEAF VACUM	LEAF	RD/BK	0	NONE
378	3	1992	DSL	A213C1539A	HWY 21	ARTICULATED VIB	HYSTER	C748A-HYPA	ROLL	YELOW	0	L14962
380	3	1985	DSL	1M2W129Y3FA021225	HWY 81	EM6-250HP	MACK	U685ST	SAND	ORANG	20110517	L14960
381	3	2001	DSL	1FVHAEA831LH79919	HWY 92	ISM305V/6-CL/CU	FREIGHTLIN	FLD112/AUT	VAC	WHITE	20110624	L43696
382	3	2011	UNL	1VR7141Y1B1000335	HWY 28	3.26 MOD B3.3	VERMEER	CHIPPER	SHOP		20110503	
383	3	1994	DSL	1FDZY90T6RVA04290	HWY 91	3306-CAT-10.5L	FORD-SHIFT	L9000	VAC	OR/WH	20110818	L25903
388	3	1993	DSL	1FDXK84EOPVA20996	HWY 6	8.3-CUMIN-250HP	FORD	F800	5 YD	ORANG	20120312	L15028
390	3	1995	DSL	1FDYR82E4SVA65533	HWY 93	8.3-CUMIN-250HP	FORD	L8000/AUTO	8 YD	ORANG	20111018	L14929
391	3	2006	DSL	LV5525R257661	HWY 15	4.5L BOOM MOWER	JOHN DEERE	TIGER		GREEN	0	NONE
392	3	2007	DSL	RSG00383	HWY 46	1104C-44T	ASV	RCV			0	
394	3	2001	UNL	3FTWE21L41MA68860	HWY 57	5.4L	FORD	F250	P/U	WHITE	20111012	R11753
395	3	1990	DSL	486SE1513LW006527	HWY 95	5.9CUMN-CHIPPER	ASPLUNDH	EEGER BEVR	CHIP	ORANG	0	MODEL 300

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
396	3	2000	UNL	1FTNF21L4YED14998	HWY 60	5.4L-PRO 3/2000	FORD	F250	P/U	WHITE	20120202	R12379
398	3	2000	DSL	514443503	HWY 98	MELROE	BOBCAT	863	LOAD	WHITE	0	NONE
399	3	2001	DSL	1FVABUAK11HH95561	HWY 99	7.2-3126CAT-230	FREIGHTLIN	L70-AUTO	CLAW	WH/OR	20111026	K20022
401	3	1995	DSL	022454B	HWY 1	TRACTOR-MOWER	FORD/MOWER	4630	MOWR	BLUE	0	L76844
403	3	1981	DSL	1M2S137C5BA001368	HWY 119	SNO FIGHTER-235	MACK	RM6854X	6X6	ORANG	20111018	M57028
404	3	1969	UNL	870M	HWY 104	SNOW BLOWER	SICARD	5150	SNBL	YELOW	0	NONE
407	3	2008	DSL	N8C509242	HWY 7	BACKHOE/LOADER	CASE	590M TURBO	HWY	YELOW	0	M12920
408	3	2002	DSL	1GBJK34102F143702	HWY 8	6.6L-300HP-4X4	CHEVROLET	3500	DUMP	ORANG	20110414	K28227
409	3	1993	DSL	1HTSEPHN6PH503310	HWY 9	DT466-225HP	INTERNAT'L	4854	6X6	BLKWH	20110923	M49991
413	3	2002	DSL	1GBJK34102F151153	HWY 13	6.6L-300HP-4X4	CHEVROLET	3500	DUMP	ORANG	20110428	K28218
414	3	2007	DSL	1HTWDAAR07J445170	HWY 14	DT466H+/285HP	INTERNAT'L	7400SFA	6YD	ORANG	20110812	M20102
417	3	2005	DSL	1HTWDAAR85J058346	HWY 17	DT466/260HP	INTERNAT'L	7400SFA	6YD	OR/BK	20110921	L56179
418	3	2007	DSL	1HTWDAAR27J445168	HWY 18	DT466H+/285HP	INTERNAT'L	7400SFA	6YD	ORANG	20110808	M20100
422	3	2006	UNL	1FTNF215X6ED96198	HWY 22	5.4-280HP-8.6GW	FORD-RON	F250-AUTO	P/U	WHITE	20111202	M20137
424	3	2004	UNL	1FTSF31L04ED81181	HWY 24	5.4-280HP-9.9GW	FORD	F350-AUTO	P/U	WHITE	20110614	L55757
427	3	2007	DSL	1HTMPAFN67H433830	HWY 27	VT365-500X	TYMCO	4200SERIES	SWEP	WHITE	20111024	M32462
432	3	2006	UNL	1FTWF31586EA78395	HWY 32	5.4L-280HP-9.9G	FORD-SIGN	F350-AUTO	SIGN	WHITE	20111013	L94388
433	3	2008	UNL	1JKODT2058M009108	HWY 33	8WHL BRK-25900	INTERSTATE	20DT	TRLR	GRAY	20111012	M23640
434	3	2003	UNL	1GCHK24U33E296029	HWY 34	6.0-300HP-8.5GW	CHEVROLET	2500HD	P/U	ORANG	20110426	L76804
441	3	2004	UNL	1FTSF31L24ED81182	HWY 41	5.4-280HP-9.9GW	FORD	F350-AUTO	P/U	WHITE	20110620	L55756
448	3	2009	UNL	1FTWF31569EA50759	HWY 48	5.4-F350 PU	FORD	F350 AUTO	P/U	WHITE	20120403	M49999
462	3	2008	DSL	1HTWDAAR38J656168	HWY 62	DT466H+/285HP	INTERNAT'L	7400WRKSTA	DUMP	ORANG	20111013	M32464
469	3	2001	DSL	LV5320P137038	HWY 69	TRACTOR/MOWER	JOHN DEERE	LV5320P	MOWR	GREEN	0	K16379
475	3	2010	UNL	1FTSX2B59AEB25558	HWY 75	5.4L-9000GVW	FORD-MARK	F250	MARK	WHITE	20110407	M57534
478	3	2006	UNL	1GBHC23436F216942	HWY 78	6.0-300HP-9.2GW	CHEVROLET	2500HD	UTIL	WHITE	20110624	M20106
480	3	2009	UNL	1GNDT33S292132287	HWY 80	4.2L 4X4 SUV	CHEVY-GEO	TRAILBLAZR	GEO	BLACK	20120202	M49970
482	3	2001	UNL	1JK00S1091M001817	HWY 82	4WHL BRK-12730G	INTERSTATE	10ST	TRLR	GREY	20110601	K20048
486	3	2003	UNL	1GCHK24U53E292175	HWY 86	6.0-300HP-8.5GW	CHEVROLET	2500HD	P/U	ORANG	20110503	L76803
488	3	2007	DSL	LD0710027	HWY 88	4X4 PAYLDR	HYUNDAI	HL757-7A	LODR	YELLO	0	40948SC
490	3	2007	DSL	1HTWDAAR07J445167	HWY 90	DT466H+/285HP	INTERNAT'L	7400SFA	6YD	ORANG	20110808	M12999
496	3	2007	DSL	1HTWDAAR47J445169	HWY 96	DT466H+/285HP	INTERNAT'L	7400SFA	6YD	ORANG	20111116	M20101
497	3	1997	DSL	1M2K191C8VM010130	HWY 129	10WHEL SNOFIGHT	MACK	MR688S	SPDR	ORANG	0	R11793
500	3	1999	DSL	1FV6JJBB5XHB30239	HWY 2	7.2-3126CAT-230	FREIGHTLIN	FL80-AUTO	8 YD	ORANG	20110512	L14982
516	1	1993	UNL	MIX40019C393	BOAT	18' BOAT	MARITIME	SKIFF	BOAT	WHITE	0	NONE
549	1	2011	UNL	5A4DD4V27B2051982	PUMPTR2	PUMP-BOAT TRLR	LOAD RITE		TRLR	GREY	0	R12837
551	82	1990	UNL	1ZE1TS42XLRN21713	BAY TR1	BOAT TRAILER	EZ LOADER	TM 7 7000	BAY	GREY	0	L76838

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
552	82	1980	UNL	10157	BAY TR2	BOAT TRAILER	HIGHLANDER	T17-12G	17'	GREY	0	P37812
553	4	2000	UNL	1W9SE2826YM174013	SHOWMO	SHOWMOBILE TRLR	WENGER	89D1-SHOWM	SHOW	WHITE	0	NONE
554	1	1980	UNL	BARRIC	BARRIC	BARRICADE TRAIL	HOMEMADE	2 WHEEL	PD	BLUE	0	17010C
555	1	1980	UNL	MUNICIPAL GARAGE	MOTORCY	MOTORCYCLE TRAI	HOMEMADE	UTILITY	MG	BLUE	0	NONE
556	1	2000	UNL	5A4ECWW27Y2050003	CRU TRL	PD RESCUE TRAIL	LOAD RITE	26T7400G1	TRLR	GREY	0	L14932
557	1	2000	UNL	MPH5230020JLPC080	RADAR	SPEED MONITOR	MPH	2000	SPED	WHITE	0	HPT
558	9	2000	UNL	5B7261863Y1001325	WTR TR4	10 TON TRAILER	CUSTOM TRL	10T242EDLP	WTR	YELLO	20110601	L14974
559	6	1985	UNL	112HDB20XFT090008	B&G TR1	2AXLE 23200LBS	EAGER BEVR	9HDB-W/BRK	HOE	YELLO	0	L70673
560	6	2012	UNL	4YMUL1628CV009086	B&G TR2	2AXLE W/BRK TRL	MODER-B&G	TRAILER	UTLT	BLACK	0	R13326
561	6	1975	UNL	757113	B&G TR3	2AXLE W/BRAKES	REID-B&G	TRAILER	UTLT	YELOW	0	B72125
562	6	2005	UNL	5LUBF15145S001607	B&G TR4	2990LB-1AXLE	STAR-B&G	6X12	TRL	BLACK	0	L86132
563	8	1981	UNL	1CZUA11S7D1104091	SS TR1	TILT TRLR	COX	TRAILR-SWR	TRLR	BROWN	0	L70671
564	6	2001	UNL	13ZLA142911000497	B&G TR5	2AXLE W/BRK 3.5	PARKER-B&G	TRAILER	UTLT	BLACK	0	K20043
565	1	2008	UNL	5HABE08158NO12980	SCALES	PD SCALES TRL	HOMESTEADR	508CS-TRL	PD	WHITE	20120201	M32492
566	82	2009	UNL	5A4HDT12292050721	BAY TR3	PARKER BOAT TRL	LOADRITE	TRAILER	25'	GREY	0	98922
568	9	2000	UNL	5B733153311002567	WTR TR7	6 TON TRAILER	CUSTOM TRL	6T162FDATW	WTR	YELLO	20110601	K20017
569	3	1987	UNL	1TKH04328HM069247	HWY 30	5TH WHL-84K GVW	TRAIL KING	1500-4360	LOBW	YELOW	20110902	L25902
570	79	2003	UNL	1A9500F1631270366	ENG TR1	AMERI*CAN TOILE	AMERI*CAN	PORTAPODDY	TRLR	WHITE	0	L71596
571	1	2004	UNL	5HABV10144N037395	HD TRL	QUAD TRAILER	HOMESTEADR	610CS PD	PD	WHITE	20120201	L43695
573	1	2004	UNL	45LBS242542074642	PUMP TR	PUMP-BOAT TRLR	SEA LION	SE24T5400B	TRLR	GREY	0	L55574
574	8	2002	UNL	4FVCABTAAYU308858	AIR COM	AIR COMPRESSOR	AIR COMPRE		TRLR		0	NONE
575	1	2005	UNL	5HABV10195N042934	QUADTRL	QUAD TRAILER	HOMESTEADR	610CS PD	QUAD	WHITE	0	L56198
577	9	2006	UNL	5HABV14266N056914	WTR TR5	ENCLOSED TRAILE	HOMSTEADER	714CT	TRL	WHITE	20120201	M12909
578	1	2007	UNL	1B93S071X7H659043	RADAR 1	SPEED MONITOR	B&W		SPED	WHITE	0	HPT 1
580	78	2007	UNL	4YMUL12107V144999	REC TRL	OPEN TRL-2 WHEE	CARRY-ON	TRLR-REC	TRLR	BLACK	20120302	M33318
581	3	1998	DSL	16MJT0616VD022000	HWY 107	4CLY JOHN DEERE	GOODWIN	WATER PUMP	PUMP	ORANG	0	NONE
583	3	1968	UNL	231922G313006	HWY 109	549CI-56K GVW	INTERNAT'L	190	TANK	ORANG	0	R12843
584	3	1992	DSL	10T2COBAON1046401	HWY 116	1992 OSH KOSH	OSH KOSH	PA2530SP		GREEN	0	R12874
585	3	1993	DSL	10T2COBA9P1047310	HWY 117	1993 OSH KOSH	OSH KOSH	PA2530SP		GREEN	0	
586	3	1979	DSL	115426N	HWY 115	DET-450HP	PETERBILT	359519	TRAC	RED	20111019	R12835
587	3	1995	DSL	1S8AD3222S0008706	HWY 114	SUMMIT TRAILER	SUMMIT	TRAILER			20110819	R12836
605	3	2006	DSL	6.041E+15	HWY 105	WOOD CHIPPER-CA	SALSCO	P13XT-CHIP	CHIP	ORANG	0	NONE
608	6	1989	DSL	1HTSDTVRXLH223175	61	DT466-225HP	INTERNAT'L	4900-B&G	DUMP	WHITE	20110411	L15018
609	6	1994	UNL	1GCHK34K3RE260094	63	5.7-225HP-9.6GW	CHEVROLET	K3500-B&G	B&G	WHITE	20111018	L15006
613	6	1995	DSL	A432908	55	50HP-4X4	FORD-B&G	555D	B&G	YELOW	0	NONE
614	6	1998	UNL	1GTGK24ROWZ540580	88	5.7-255HP-8.6GW	GMC P/U	K2500-B&G	B&G	WHITE	20110907	L15041

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
616	6	1991	DSL	01HF01993	70	50HP-2YD PAYLOA	CATERPILLA	IT28B-B&G	LODR	YELOW	0	NONE
640	1	2001	UNL	3H1AF160X1F200040	640	MARKED MOPED	HONDA	SA50-ELITE	MOPD	BLACK	20110621	640
641	1	2001	UNL	3H1AF16001D200046	641	MARKED MOPED	HONDA	SA50-ELITE	MOPD	BLACK	20110621	641
642	1	2002	UNL	1HD1FMW142Y641522	642	MOTORCYCLE	HARLEY DAV	FLH	HP-2	WHITE	20110317	642
643	1	2002	UNL	5ASAG47472F030284	643	ELECTRIC CAR	GEM	1114-00115	GEM	BLUE	0	10449LU
644	1	2003	UNL	JKBVFHA133B522971	644	360CC 4X4	KAWASAKI	KVF360-A1	QUAD	GREEN	0	644
645	1	2004	UNL	JKBVFHA154B538588	645	360CC 4X4	KAWASAKI	KVF360-A2	QUAD	GREEN	0	
655	6	2007	DSL	32021	55A	4X4 TRACTOR	KUBOTA	L4240	LOAD	ORANG	0	NONE
665	3	2001	UNL	T4DR010808181	HWY 65	DIESEL FUEL TRA	HOMEMADE	200 GALLON	FUEL	ORANG	0	K28202
681	20	2011	UNL	1FMJK1GS4BEF33735	681	5.4-300HP	FORD-6581	EXPO-SPOND	6581	WHITE	20110922	R12872
682	20	2005	UNL	1FMPU16555LA38546	682	5.4L-300HP	FORD-6580	EXP0-SPOND	6580	WHITE	20111202	L56185
683	20	2005	UNL	1FMPU16515LA31772	683	5.4L-300HP	FORD-6530	EXP0-CHIEF	6530	WHITE	20120213	L56186
685	20	2003	DSL	1FDXE45F43HA80425	685	7.3L-15K GVW	FORD-6518	E450-685	6518	WHITE	20110615	L70685
686	20	2000	DSL	1FDXE45F0YHA77044	686	7.3L-15K GVW	FORD-6516	E450-686	6516	WHITE	20110620	L14969
687	20	2006	DSL	1FDXE45PX6HB13988	687	6.0L-15K GVW	FORD-6520	E450-687	6520	WHITE	20120206	L98626
689	20	2008	DSL	1FDXE45PX8DA95521	689	6.0L-15K GVW	FORD-6519	E450-689	6519	WHITE	20110811	M40289
714	70	1986	UNL	1GBJK34M8GJ172671	303	5.7L-11K GVW	CHEVROLET	K30	WREC	WHITE	20110601	L76842
715	70	2002	UNL	5ASAG27472F019547	MG 49	GEM CAR MUN GAR	CHRYSLER	GEM	SHOP	WH/RE	0	18447LU
719	40	1995	DSL	1GDL7H1J2SJ503262	93	3116 CAT-AUTO	GMC-LITE	C7H042	BUCK	WHITE	20110617	L15008
733	74	1995	UNL	1FDKE30HXSHA32133	37	5.8-12P-10.5GW	FORD-NUTRA	E350	BUS	WHITE	20120202	L15039
740	74	2010	UNL	1FDFE4FS5ADA08953	86	6.8L-14PASS	FORD-NUTRA	E450-14500	BUS	WHITE	20110614	M74863
804	8	1998	UNL	1GTGK24R4WE542257	24	5.7-255HP-8.6GW	GMC-PU-SWR	K2500	SWR	RED	20111013	L15000
805	8	1975	UNL	C6ODVW06441	26	330XD-CI-8 CYL.	FORD-SWR	C-600	ROD	ORANG	20110601	L76833
806	8	1957	UNL	4B57T130036	27	GENERATOR 14KGW	CHEVROLET	4400	4X2	GREEN	20110614	L76832
809	3	1994	DSL	1M2P286C1RM018906	HWY 31	8.2L/10 WHEEL	MACK	FD DUMP	DUMP	WHITE	20110728	R12408
812	8	1991	DSL	1FDYR82AXMVA29734	25	7.8L-DIESEL VAC	FORD-SWR	L8000	VAC	WHITE	20110406	L15011
815	8	2011	DSL	NAHH00520	14	B95B	NEWHOLLAND	B95B	HOE		0	NONE
816	8	1998	UNL	1GTHG35R5W1042044	80	5.7-255HP-8.6GW	GMC-CAMERA	G3500	SWR	WHITE	20110504	L14998
903	9	1998	DSL	1HTSCABM4XH627837	3	T444E-190-20.5G	INTERNAT'L	4700-WTR	DUMP	WHITE	20110526	L14931
905	3	1989	DSL	1HTLDTVR2KH653186	HWY 79	DT466-185HP	INTERNAT'L	S-1900	CHIP	WHITE	20110602	L15046
909	9	1998	UNL	1GBHK34R5WE203392	7	5.7-255HP-9.6GW	CHEVROLET	K3500-WTR	UTLY	WHITE	20110510	L14992
910	9	1998	UNL	1GCHK34R1WE209086	8	5.7-255HP-10.GW	CHEVROLET	K3500-WTR	DUEL	WHITE	20110617	L14994
912	9	1989	DSL	1HTLDTVR1KH663482	10	DT466-185HP	INTERNAT'L	S1900-WTR	DUMP	WHITE	20120206	L15017
916	9	1987	DSL	C772557	15	50HP-BACKHOE	FORD-WTR	555B	WTR.	YELOW	0	18970M
917	9	2003	DSL	LV0110T210257	16	BACKHOE	JOHN DEERE	110-WTR	WTR	YELOW	20120201	NONE
919	9	1996	DSL	261425UAG327	18	4039D-DIESEL-CO	INGERSOLL	P185 WJD	COMP	CREAM	0	NONE

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
920	9	2001	DSL	4FVCABDA81431794	18A	#317594UKK221	INGERSOLL	P185 WJD	COMP	CREAM	0	NONE
925	99	1987	UNL	1GDG6D1A5HV502525	SD1B1	1987 GMC 6000	GMC				0	L70652
926	99	1987	UNL	1GDE6D1AXHV500468	SD2C1	1987 GMC 6000	GMC				0	L70650
927	99	1997	UNL	3FEKF38GXVMA65105	SD3B6	1997 FORD F350	FORD	F350			0	L25905
928	99	2009	UNL	1FTNF21589EA07044	SD4B8	2009 FORD F250	FORD	F250			0	M49903
929	99	2009	UNL	1FTNF21589EA07045	SD5B9	2009 FORD F250	FORD	F250			0	M40299
930	99	2002	UNL	1FTSF31LX2EB83432	SD6B29	2002 FORD F350	FORD	F350			0	K28229
931	99	1999	UNL	1FTPE242SXHC12802	SD7B30	1999 FORD E250	FORD	E250			0	L33332
932	99	1999	UNL	1FTPE2423XHC12801	SD8B31	1999 FORD E250	FORD	E250			0	L33331
933	99	1996	UNL	1FTCR10A0TUC56413	SD9B38	1996 FORD RANGE	FORD	RANGER			0	L33330
934	99	2010	UNL	1FDRF3D67BEB42353	SD10B12	PICKUP	FORD	F350	P/U	BLUE	0	R12383
935	99	1996	UNL	1FTCR11X9TUC56414	SD11B39	1996 FORD RANGE	FORD	RANGER			0	L76820
936	99	2007	UNL	1GCEK14V87V150178	SD12B2	2007 CHEVY 1500	CHEVY	1500			0	M20119
937	99	2003	UNL	1FTNF21L43EA64476	SD13B7	2003 FORD F250	FORD	F250			0	L77100
938	99	2001	UNL	1FTSF31L31EA52907	SD14B58	2001 FORD F250	FORD	F250			0	L25912
939	99	2010	UNL	1FTNF2B53AEA18294	SD15B10	2010 FORD F250	FORD	F250			0	M57013
940	99	1990	UNL	1GCEK14H8L1261598	SD16B65	1990 CHEVY 1500	CHEVY	1500			0	L25913
941	99	1990	UNL	2GCEK14H0L1260901	SD17B68	1990 CHEVY 1500	CHEVY	1500			0	L25914
942	99	1990	UNL	1GNEV16K8LF167379	SD18S1	1990 CHEVY 4X4	CHEVY	K1500	SUBU	WHITE	0	L18838
943	99	2002	UNL	1G1JC524927317951	SD19A3	2002 CHEVY CAVA	CHEVY	CAVALIER			0	K28237
944	99	2003	UNL	1FMZV73K53UB47117	SD20T1	FORD EXPLORER	FORD	EXPLORER		WHITE	0	M-74857
945	99	2006	UNL	2MEFM74W76X605969	SD21S2	2006 MERCURY GR	MERCURY	GR MARQUIS			0	M50484
946	99	2000	UNL	JHLRD1867YC057738	SD22T2	2000 HONDA CRV	HONDA	CRV			0	M-64686
947	99	2007	UNL	1FTWF31Y67EA25951	SD23T3	2007 FORD F350	FORD	F350			0	M20108
948	99	2001	UNL	2G1WF52E619306876	SD24T10	2001 CHEVY IMPA	CHEVY	IMPALA			0	K20068
949	99	2010	UNL	1FDWF3051AEA18295	SD25B11	2010 FORD F350	FORD	F350			0	M57029
950	99	2010	UNL	1FMEU7DE4AUA90493	SD26A4	2010 FORD EXPLO	FORD	EXPLORER			0	M74860
951	99	2013	UNL	1GB6G5BG8C1119155	SD27111	2013 CHEVY BUS	CHEVY	BUS			0	R13334
952	99	2013	UNL	1GB6G5BG8C1118846	SD28112	2013 CHEVY BUS	CHEVY	BUS			0	R13335
954	3	2005	UNL	T4PRO52610353	HWY 54B	ASPHALT HAULER	SPAULDING	RMW		YELLO	0	
955	99	2013	UNL	1GB6G5BG6C11282	SD29113	2013 CHEVY 4500	CHEVY	VAN			0	R24467
956	99	2013	UNL	1GB6G5BG2C1127784	SD29114	2013 CHEVY 4500	CHEVY	VAN			0	R24468
957	99	2013	UNL	1GB6G5BG9C1128124	SD29115	2013 CHEVY 4500	CHEVY	VAN			0	R24466
968	98	2011	UNL	1GNSK2E01BR345017	FD16230	2011 CHEVY TAHO	CHEVY	TAHOE			0	6230
969	98	2007	UNL	3GNGK26K57G278743	FD26231	2007 CHEVY SUBU	CHEVY	SUBURBAN			0	6231
970	98	2005	UNL	1GNFK16245J250785	FD36232	2005 CHEVY SUBU	CHEVY	SUBURBAN			0	6232

VEH	DEPT	YEAR	FUEL	VIN NUMBER	TOWN ID	DESCRIPTION	MAKE	MODEL	TYPE	COLOR	INSP DT	PLATE
971	98	2008	UNL	1FMFU16578LA84850	FD46233	2008 FORD EXPED	FORD	EXPEDITION			0	6233
972	98	2002	UNL	1GNEK13412T280464	FD56290	2002 CHEVY TAHO	CHEVY	TAHOE			0	6290
973	98	2001	UNL	1B7HF13731J521985	FD66291	2001 DODGE RAM	DODGE	RAM			0	6291
974	98	2003	UNL	1GNEK13Z23R176393	FD76293	2003 CHEVY TAHO	CHEVY	TAHOE			0	6293
975	9	1998	UNL	1GTHG35R8W1041759	75	OFF ROAD	GMC-VAN	G3500-WTR	WTR	WHITE	20110805	L14997
983	30	1900	UNL	MISC 30	MISC 30	10K/NL-10K/DSL	MUNIC FUEL				0	
984	3	1900	UNL	MISC 03	MISC 03	MISC 03	HIGHWAY				0	NONE
985	9	1900	UNL	MISC 09	MISC 09	MISC FOR DEPT 0	WATER DEPT				20111101	NONE
987	8	1900	UNL	MISC 08	MISC 08	MISC FOR DEPT 8	SEWER				0	
988	79	1900	UNL	MISC 79	MISC 79	MISC 79	ENGINEERIN				0	
989	78	1900	UNL	MISC 78	MISC 78	MISC 78	RECREATION		MISC		0	
990	77	1900	UNL	MISC 77	MISC 77	MISC FOR DEPT 7	SANITATION				0	NONE
992	75	1900	UNL	MISC FOR DEPT 5	MISC 75	MISC FOR DEPT 7	BUILDING				0	NONE
994	72	1900	UNL	MISC 72	MISC 72	MISC FOR DEPT 7	SUPERVISOR				0	
996	70	1900	UNL	MISC 70	MISC 70	MISC 70	MUNICIPAL		MISC		0	NONE
997	6	1900	UNL	MISC 06	MISC 06	MISC FOR DEPT 6	B & G				0	
998	2	1900	UNL	MISC 02	MISC 02	MISC FOR DEPT 2	AMBULANCE				0	
999	1	1900	UNL	MISC 01	MISC 01	MISC 01	POLICE				20120201	MISC 01

APPENDIX J

Town of Riverhead

Flanders Bay Watershed

Watershed Improvement Strategy

TOWN OF RIVERHEAD

FLANDERS BAY WATERSHED

WATERSHED IMPROVEMENT STRATEGY

April 30, 2012
Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200, Ext. 201

WATERSHED IMPROVEMENT STRATEGY
TOWN OF RIVERHEAD
FLANDERS BAY WATERSHED

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FIGURES

Figure 1.1 Site Location Map and Overview of Sewersheds – Flanders Bay Watershed

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ATTACHMENTS

Attachment A Retrofit Plan

WATERSHED IMPROVEMENT STRATEGY
TOWN OF RIVERHEAD
FLANDERS BAY WATERSHED

1.0 INTRODUCTION

Pursuant to Section 402 of the Clean Water Act, stormwater discharges from small municipal separate storm sewer systems (small MS4s) located in urbanized areas or additionally designated by New York State are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is an NPDES-approved program with permits issued in accordance with the Environmental Conservation Law. In 2010 the New York State Department of Environmental Conservation (NYSDEC) promulgated the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-0-10-002.

Only those small MS4 operators who develop and implement a stormwater management program (SWMP) and obtain permit coverage in accordance with Part II of the SPDES general permit are authorized to discharge stormwater from their small MS4 under this SPDES general permit.

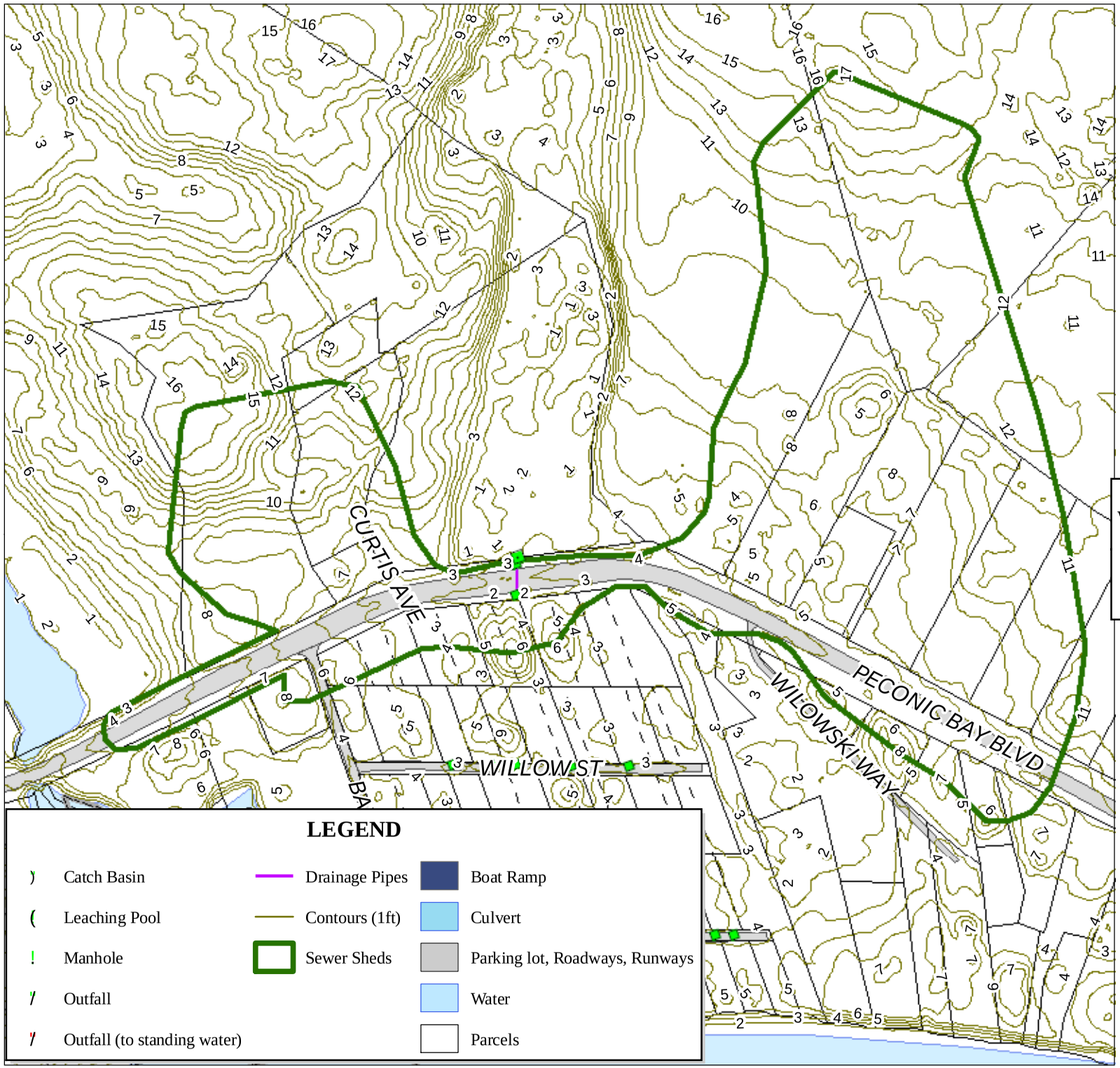
Part III. B. 2. of the permit requires covered entities to meet the reduction of the pollutant of concern (POC) as defined by the Total Maximum Daily Load (TMDL) program in Part IX of the permit. Deadlines included in Part IX. are for Retrofit Plan Submission, Watershed Improvement Strategy and load reduction of the POC associated with individual covered entities. Table IX. C. specifies a deadline of May 1, 2012 for completion of the Flanders Bay Watershed (FBW) Improvement Strategy. The north side of the FBW is located in the Town of Riverhead (the Town) (Figure 1.1). Figure 1.1 also provides an overview of the individual sewershed locations within the FBW.

In addition to the requirements of Part VII of the MS4 permit, the Town of Riverhead must develop and implement the Minimum Control Measures (MCMs) described below. These MCMs apply to storm sewersheds which are potential sources of pathogens to the FBW and are located within the Town. The sewersheds, outfalls, piping and structures are shown and labeled in Figures 1.2 through 1.4.

1.1 Stormwater Programmatic Assessment and Goals

An examination of diverse stormwater management programmatic measures in the FBW was performed by the Town. Regular inspections and maintenance are a top priority to ensure long-term function of the Town's stormwater infrastructure. Several public education focus areas and public involvement/participation programs can help improve the health of the watershed. Outreach initiatives will be tailored to target the specific issues in various neighborhoods throughout the watershed including pet and goose waste. Inter-municipal and agency coordination of these proposed restoration efforts are being developed and can reduce costs and improve effectiveness.

OFFICE OF THE TOWN ENGINEER



Property Lines Courtesy:
Suffolk County Real Property
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Figure No. 1.3

map of

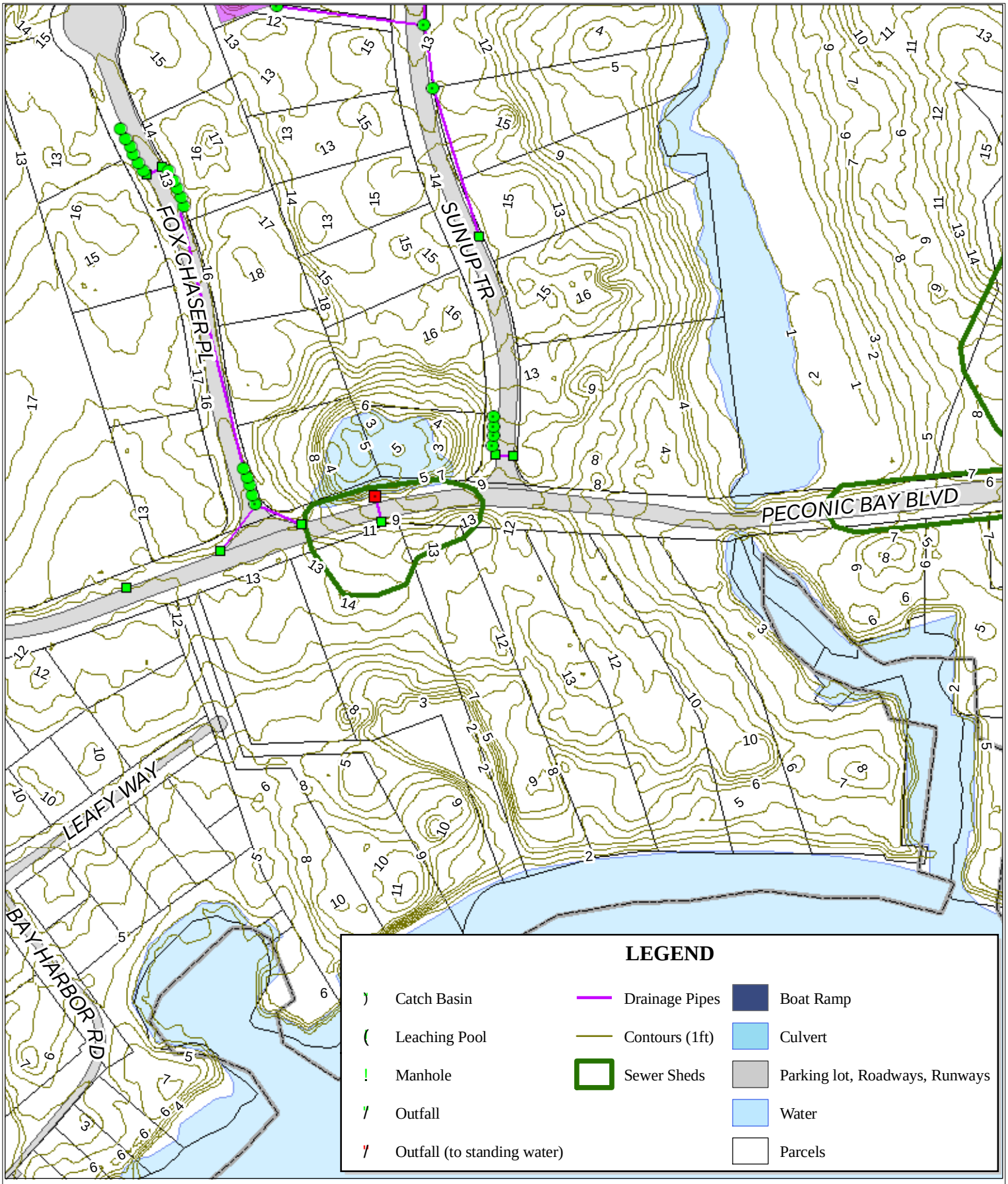
WATERSHED IMPROVEMENT STRATEGY INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

DATE: 3/1/2012

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

OFFICE OF THE TOWN ENGINEER



DATE: 3/1/2012

0 100 200 400 Feet

μ

map of

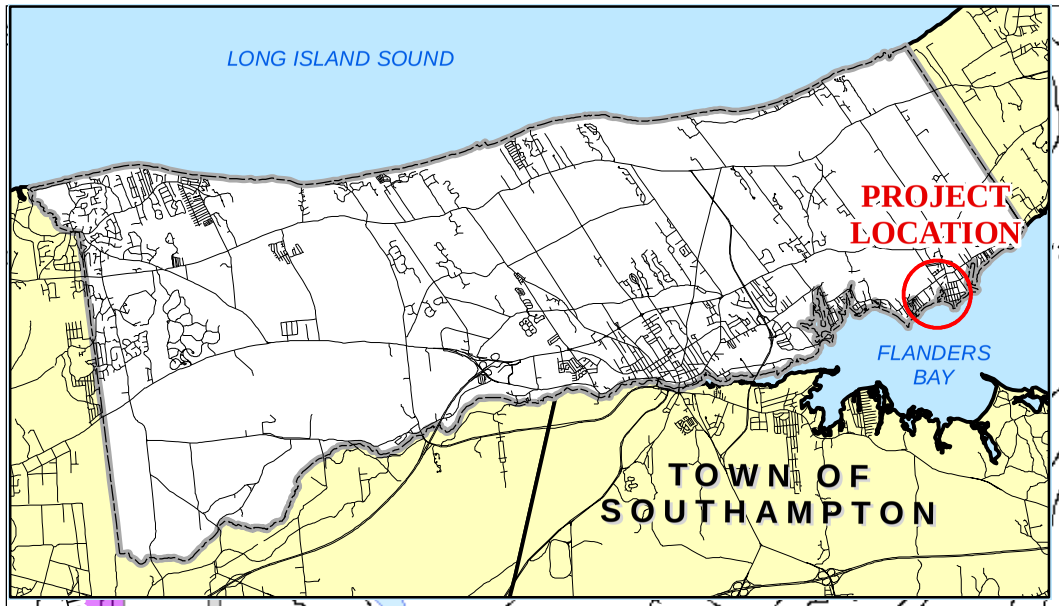
WATERSHED IMPROVEMENT STRATEGY
INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

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Figure No. 1.2

TOWN OF RIVERHEAD
200 Howell Ave.
Riverhead, NewYork 11901

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μ

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Figure No. 1 - 1

map of

WATERSHED IMPROVEMENT STRATEGY
OVERVIEW OF SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

FOX CHASER PL
CURTIS AVE
BAY AVE
WILLOW ST
LOCUST ST
PECONIC BAY BLVD

FIGURE No. 1.2
FIGURE No. 1.3
FIGURE No. 1.4

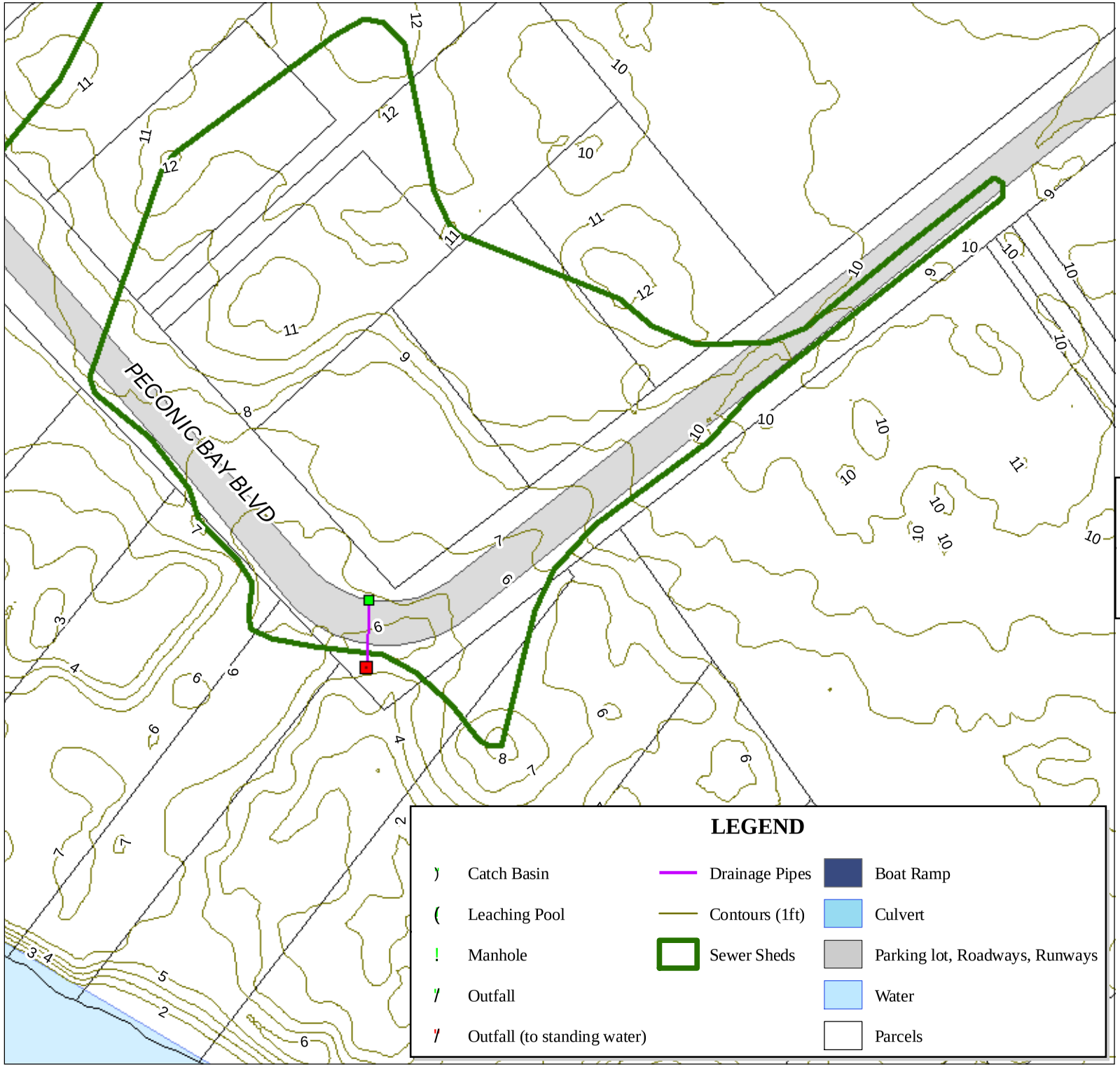
DATE: 3/1/2012

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

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Property Lines Courtesy:
Suffolk County Real Property
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Figure No. 1.4

map of

WATERSHED IMPROVEMENT STRATEGY INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

LEGEND

- Catch Basin
- Leaching Pool
- Manhole
- Outfall
- Outfall (to standing water)
- Drainage Pipes
- Contours (1ft)
- Sewer Sheds
- Boat Ramp
- Culvert
- Parking lot, Roadways, Runways
- Water
- Parcels

DATE: 3/1/2012

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

1.2 Stormwater Management Assessment and Goals

An assessment of stormwater management and treatment measures in the FBW was performed by the Town in order to identify problem areas and potential sites for the installation of stormwater best management practices (BMPs). The goal of these BMPs is to improve the removal of pathogens before the stormwater runoff reaches Flanders Bay (FB). The assessment is detailed in the Retrofit Plan included in Attachment A.

2.0 PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS (MCM 1)

2.1 Public Education and Outreach – Planned Focus Areas

An education and outreach campaign will be used to target specific audiences to try to positively influence human behaviors in the watershed with potential ecologic impact. The program will also notify the general public to raise awareness that land use and human activity within the watershed have a direct effect on the health and quality of the coastal resources. The key public education issues in the FBW that will help address the key goals of this Watershed Improvement Strategy (WSIS) are:

- Goose population management;
- Pet waste management;
- Stormwater management; and
- Septic system maintenance.

These focus areas are described below, followed by a description of planned education and outreach programmatic techniques. These techniques are intended to be a menu of strategies that will be employed in various combinations depending on time, budget and target watershed audience.

2.1.1 Goose Population Management

There are several methods that are used in various applications to reduce the populations of geese in and around water bodies, thereby reducing pathogen loads to those areas. These include habitat modification, frightening, exclusion, discontinuation of feeding, relocation, hunting, and egg addling. Some of these methods require changes in land use practices by the property owners, and some require professional or third-party assistance.

Habitat modification refers to alterations of large expanses of open grassed areas that are often mowed to the water's edge. These areas are attractive to geese that rely on a clear line of sight and open access to the water. Modifying these open spaces to allow for a vegetated buffer along the water's edge minimizes the attractiveness to geese. A 50-foot vegetated buffer, with growth up to 3-4 feet in height has a significant impact in deterring geese. The vegetated buffer replaces the transitional open space from the open water. Creation of this buffer, however, often depends

on the will of the land owner to convert mowed area to vegetated area which generates the need for public education.

Tools for implementing public education include: mailers, television and radio advertisements, and newspaper articles and signage. Demonstration projects are another common form of public education. An example is allowing a 50-foot-wide buffer area of open mowed lawn along the waterfront to revegetate on publicly owned properties or on private properties of willing owners. Information regarding the former presence of geese, including photographs of the previous vegetation in contrast to the revegetated area, educates a wider audience about the goal of the program. Signage describing the area as a goose management buffer will be placed in public view, and followed by mailers or brochures explaining the project. Visualization of a completed project will streamline implementation by enabling expectations of project effectiveness. Other methods of goose management include live capture of the birds, egg addling, and hunting. Egg addling is a method used to control the hatching of eggs. The eggs in a nest are shaken, making them nonviable, and then replaced in the nest. These methods require permits from the United States Fish and Wildlife Service (USFWS) and may require state or local permits as well. In some cases, these methods may face local opposition; but in severe situations of uncontrolled goose populations, a local municipality may opt for these more direct methods.

2.1.2 Pet Waste Management

Pet waste can be a nuisance to the public in addition to contributing pathogens to a water body via stormwater runoff. Picking up after a dog can also be a nuisance for pet owners. However, a growing number of pet owners are realizing the aesthetic and environmental health benefits of cleaning up pet waste from public areas and their own back yards.

In many communities throughout the country “pooper-scooper” laws have been enacted which require pet owners to clean up after their pets. Pooper-scooper signs and bags installed in key locations in the sewershed, along with the stigma of adding to the degradation of the watershed by not picking up after one’s pet, can have positive long term effects on the watershed. A media campaign will be created with signage posted at public open spaces and along walking trails.

2.1.3 Stormwater Management

Homeowners and the general public in a watershed can play an important role in the stewardship of the MS4 on a daily basis. This is particularly true in subdivisions, where the stormwater management practices may be isolated from routine Highway Department programs and where small stormwater management practices may be dispersed throughout the subdivision or on individual lots.

A stormwater awareness program developed and implemented through the Town can be a very useful tool in promoting effective and sustainable stormwater management. Mailings and inserts with local billings and other municipal communications to residents can raise awareness and inspire vigilance among local residents. Residents can help to monitor swales, leaching systems, catch basins and discharge locations to ensure proper operation. Residents can report problems

to the Highway Department and thus help prevent infrastructure failure. In the fall, residents can help by clearing leaves and debris from the catch basin grates and by not throwing leaves and debris into drainage swales, onto roadways, or into other stormwater pathways.

2.1.4 Septic System Maintenance

Septic systems require regular maintenance and inspection, and require that homeowners are aware of the location and operational characteristics of the system. Most systems necessitate septic tank pumping at approximate three to seven year intervals (depending upon the input to the system and the size of the settling tank) to remove accumulated solids. There are many septic system maintenance additives available to reduce the accumulation of solids and the required frequency of pumping. However, these additives can frequently be harmful to the system, particularly when used inappropriately. Detrimental effects of using additives inappropriately include impairing the microbial community responsible for much of a system's treatment ability, reducing the effectiveness of the leaching field, and contributing chemical contaminants to the underlying groundwater. These effects are particularly important in coastal areas, e.g., the Town of Riverhead, that are characterized by sandy soils where groundwater movement to receiving waters can be very rapid. A properly designed, installed, and maintained septic system should not need chemical additives to function properly. It is important for homeowners to be cautious of what is introduced to their septic systems and of the resultant potential effects. Without proper maintenance, the system can lose significant treatment capacity and can clog, causing leachate to breach ground surface. Alternatively, the system could back up into the household. Both of these scenarios cause a public health concern as well as a threat to local water resources.

The Town will initiate a public mailing to promote septic system maintenance by reminding residents of maintenance needs. The New York Onsite Wastewater Training Network at the State University of New York at Delhi provides trainings throughout the state and is a wealth of information about septic systems, including proper siting, design and maintenance. While this program's training is geared primarily toward engineers and practitioners, the New York State Department of Health website provides information and a printable pamphlet aimed at residents that describes proper septic system operation and maintenance (O&M). This pamphlet will be updated to include references to local water resources that may be threatened or experiencing poor water quality, and highlight the need for septic system maintenance. The Rhode Island Cooperative Extension has developed a number of helpful fact sheets aimed at homeowners with information about septic system maintenance, ways to prolong the life of the system, ways to upgrade the system to provide better treatment, the effects of additives, and other useful information.

The Suffolk County Department of Health Services (SCDHS) has also produced a brochure entitled, "Home Sewage Disposal Systems in Suffolk County", which describes a septic tank and cesspool system that is typical of Suffolk County. This brochure, last updated in 2004, will be improved by the Town to provide additional information in regard to improving on-site wastewater treatment through innovative wastewater design. This would be useful for

homeowners, especially those with aging systems (25-30 years old) and in need of significant repair or replacement.

2.2 Public Education and Outreach – Planned Programs

The following menu of activities will be implemented as part of the FBW outreach and education program to address the environmental health of the coastal water resources. These activities are designed to focus on one or a combination of the areas discussed above. These activities will be implemented by the Town in conjunction with the Peconic Estuary Program, Suffolk County, homeowners' associations, local schools, or other active citizens groups.

2.2.1 Watershed Awareness Day

Organize a watershed awareness day, perhaps associated with an Earth Day program. The Town will organize a watershed awareness day to take place along the shore or at an open space within the watershed. This event could occur on Earth Day and include educational booths, games related to water quality, demonstrations of innovative technologies, sales of rain barrels and native grass seed, a swim or kayak race, a road race through the watershed, and/or an afternoon or evening clambake. A watershed awareness day will enable residents to make the visual and experiential connection between the coastal resources and the watershed.

2.2.2 Media Campaigns

Media campaigns will be developed with specific messages regarding applicable management strategies such as residential septic system maintenance, repair or replacement; shoreline vegetation management; or pet waste management. These campaigns will include fliers and brochures to be distributed at community events or mailed out with utility bills, as well as posters to be distributed and posted in municipal offices, public libraries, schools, and other highly visible areas. Articles will be developed for submittal to the local newspaper and will focus on watershed management. Television advertisements or stories on local television stations or the local cable-access stations will be devoted to homeowner activities that impact the watershed. Brochures related to pet waste clean up will be handed out with dog licenses and distributed by local veterinarians.

2.2.3 Institution of an "Adopt-a-Watershed" Organization

"Adopt-a-Watershed" organizations will clean up litter, monitor storm drain outfalls, or promote watershed stewardship. Monitoring storm drain outfalls will be implemented with simple water quality kits in conjunction with observations. This organization serves to gauge any significant changes that may be occurring in the watershed and has the potential to involve children as well.

2.2.4 Demonstration Projects

Projects that demonstrate the construction and operation of a vegetated buffer or alternative stormwater management technique will be constructed on publicly-owned land or on private lots

of willing owners. Demonstration projects allow residents to visualize construction and completion of a BMP thus facilitating expectation of the outcome. Once initiated, the planning and implementation phases of the project will be documented in photographs which will be used in mailers, brochures, posters, and a media campaign. These projects can serve as local news stories as well. Signage will be placed at the edge of the site to draw public attention and to provide direction in finding additional information.

2.2.5 School Watershed Science Programs

Science and humanities programs in local schools can help to educate youth on watershed management and the connection between land uses and water quality in the FBW.

3.0 PUBLIC INVOLVEMENT/PARTICIPATION IN WATERSHED MANAGEMENT (MCM 2)

A public involvement/participation program will notify and inform the general public within the FBW that land use and human activity have a direct effect on the health and quality of the coastal resources. The key focus area of this program is stormwater management and is described below.

3.1 Public Involvement/Participation – Planned Programs

The public involvement/participation program in the FBW involves implementation of a menu of activities to address environmental health of the coastal water resources. These activities are designed to focus on watershed management and will be implemented by the Town in conjunction with the Peconic Estuary Program, Suffolk County, homeowners' associations, local schools, or other active citizens groups. These activities will be employed in various combinations depending on time, budget and target watershed residents.

3.1.1 Demonstration Projects

Demonstration projects will include the general public in planning and implementation. Residents can also install on-site retrofits to improve stormwater management at private homes. These can include installation of rain barrels to collect water from rooftops through roof leaders. A rain barrel program will be established through the Town or local non-profit organizations, in conjunction with a rain barrel distributor, to sell rain barrels at a discounted price to community members. In addition, other on-site retrofits may include dry well installation to collect and infiltrate roof runoff and overflow from the rain barrels.

3.1.2 Watershed Clean-Up Days

Community volunteers will coordinate a watershed clean-up day to collect litter and debris throughout the watershed. These events will enable the public to observe FB and areas of the watershed with which they are unfamiliar and give them a sense of ownership and stewardship beyond a single clean-up event.

3.1.3 School Watershed Science Programs

Environmental hands-on school programs will include water quality monitoring, gardening, recycling, and composting. These programs will facilitate student involvement/participation in watershed management and stewardship.

4.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) (MCM 3)

4.1 On-Site Sanitary System IDDE Program

The Town in cooperation with the SCDHS is in the process of identifying existing septic systems located within the FBW. Once identified, the property owner will be notified via letter, or by a mailer included with a tax bill, that verification is required of a system inspection by a professional, i.e., licensed plumber or professional engineer, within the past five years and that the system is working properly. If the system has not been inspected during the past five years, an inspection must be performed within 60 business days from the date of the letter and verification of the inspection and proper system operation forwarded to the Town.

4.2 MS4 Conveyance System Mapping

The Town has developed and currently maintains a map developed with geographic information system (GIS) software which shows the entire Town's identified MS4 conveyance system. The map for the conveyance system includes the following information:

- Identification of closed pipe or open discharge drainage conveyance system;
- The material, shape and size of pipe for closed systems;
- The lining material, shape and dimensions for channels or ditches in an open drainage system;
- Drop inlet, catch basin, and manhole locations; and
- The number and size of connections (inlets/outlets) to catch basins and manholes with the direction of flow.

5.0 POST-CONSTRUCTION STORMWATER MANAGEMENT (MCM 5)

5.1 Planned Modifications to Land Development Review Process

The land development review process will be improved to reduce potential impacts to the water quality in FB. These improvements include implementing the use of comprehensive and uniform stormwater standards for new development and redevelopment. These standards will include explicit stormwater treatment requirements to reduce pathogen and suspended solids loading to FB as well as to improve erosion control. The Planning Board will use this set of standards as a uniform reference to improve consistency in stormwater design and management throughout the Town. These standards will be incorporated as a separate policy that can be referenced by the subdivision regulations. This measure allows more flexibility to update the policy as

technologies advance and conditions change, without having to formally update the subdivision regulations.

The standards will include a pre-approved list of appropriate stormwater BMPs, along with design guidelines for proper siting, sizing, installation and O&M of the practices. As a starting point, specific sections of the New York State Stormwater Management Design Manual (NYSDEC, August 2010) (Design Manual) will be the general reference for stormwater design. This manual provides a set of stormwater practices, sizing criteria and performance criteria, and describes in detail the proper design, limitations, and effectiveness of a host of practices. Those practices that are more effective than others for pathogen removal (e.g., infiltration and constructed wetlands are more effective than swales) will be promoted or required by the Town in lieu of other practices. For example, catch basin inserts (proprietary BMPs gaining popularity in some areas due to easy and low-cost installation) have not been studied sufficiently to estimate pathogen removal, but their operating characteristics indicate that pathogens will not be reduced by significant levels. Refer to the Meetinghouse Creek Watershed Management Plan, Horsley Witten Group, July 2006 (Horsley Witten, 2006) for more details and references for these findings. BMPs with high pathogen removal capabilities that will be promoted include constructed wetlands and infiltration.

The Design Manual also provides useful landscaping and site layout techniques to reduce pathogen loading to receiving waters, which may be useful to include in the Town's list of practices and standards. The site layout techniques include buffer standards for separating development from surface waters. Buffers are effective for discouraging nuisance geese populations.

Goals:

- Adopt a short, pre-approved list of BMPs effective at pathogen removal.
- Require appropriate landscaping and site layout techniques.

5.2 Planned Maintenance of Stormwater Management Practices

The Town will develop a brief landowner's guide for maintenance of stormwater structures. This guide will focus on inspection and maintenance of on-lot stormwater practices for both residential and commercial/industrial sites. The guide will also describe measures that local landowners can implement to assist the Town in maintaining public infrastructure, such as cleaning off debris from around nearby catch basins and reporting stormwater infrastructure malfunctions and flooding problems.

5.3 Retrofit Plan

The post-construction stormwater management measures described above are also included in Attachment A to this Watershed Improvement Strategy - Retrofit Plan – along with other additional measures. The Retrofit Plan will address runoff from sites to correct or reduce pathogen loading problems. At a minimum, the Town will:

- Establish procedures to identify sites with erosion and/or pathogen loading problems;
- Establish policy and procedures for project selection. Selection criteria include the pathogen reduction potential of a proposed retrofit practice; the ability to use standard, proven technologies; and the economic feasibility of constructing the proposed practice. As part of the project selection process, Suffolk County through the Peconic Estuary Program has initiated the Peconic Estuary Intermunicipal Stormwater Management Project to assist municipalities within the Peconic Estuary to work together in meeting the NYSDEC 2010 MS4 General Permit requirements. The Town is a participant of this project; and
- Establish policy and procedures for project permitting, design, funding, construction and maintenance.

Upon NYSDEC approval of the plan, its requirements will become enforceable tenets of the Town's MS4 Permit.

6.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (MCM 6)

6.1 Planned Maintenance of Stormwater Infrastructure

In the Town of Riverhead, ownership of stormwater infrastructure is shared by the Town and individual landowners. When a new subdivision road is constructed and accepted by the Town, the responsibility for the drainage infrastructure also passes to the Town. The drainage infrastructure that collects and treats stormwater on each individual lot is the responsibility of the landowner to inspect and maintain.

In order to function as designed over the long term, stormwater infrastructure must be maintained regularly. This is particularly important with structures designed for infiltration, such as leaching catch basins, which may receive stormwater that has not been pre-treated and therefore contains oils, greases, organic matter, and suspended solids that can clog the system. Depending on the land use, inadequate pretreatment may allow pathogens to enter groundwater and lead to both health and environmental threats. On individual properties, runoff from rooftops and driveways that is not properly infiltrated into dry wells or other onsite structures could back up into basements, cause nuisance flooding, and in some cases, lead to surface discharges and erosion rather than infiltration.

6.2 Pet Waste Prohibition

In accordance with section 48-18 of Town Code no dogs or other domestic animals shall be allowed on any public bathing beach or recreation center except guide dogs.

6.3 Goose Feeding Prohibition

In accordance with Chapter 112 of Town Code no person shall feed or provide food for any geese on Town property at any time of the year.

6.4 Pet Waste Bag Program

As described in section 2.1.2, the Town will enact additional pet waste prohibition laws which require pet owners to clean up after their pets. Signs and bags for pet waste collection and disposal will be installed in key locations in the sewershed. These key locations include public open spaces and along walking trails.

6.5 Goose Population Management

As described in section 2.1.1, habitat modification, frightening, exclusion, relocation, hunting, and egg addling are methods that will be evaluated and implemented to manage the goose population in the Town. Selection criteria include effectiveness, cost public opposition and ease of implementation.

The following goals are intended to improve the system through maintenance of stormwater practices and infrastructure in the FBW and throughout the Town of Riverhead.

6.6 Loose Leaf Pickup Program

As of 2012, the Loose Leaf Pickup program has been terminated and all residents are required to bag leaves for pickup in lieu of the Loose Leaf program. Loose leaf pickup encourages residents to pile leaves along the street edge, which can cause significant clogging of the catch basins and other drainage structures.

Goals:

- Adopt a regular municipal stormwater inspection and maintenance schedule for municipally-owned stormwater infrastructure. Regular inspections will be performed at least annually in the early spring, prior to the spring rains but after the winter snow melt. Cleanouts of leaching catch basins and other sedimentation practices are recommended to be performed annually, but at a minimum of every 2-3 years, and on an additional as-needed basis. This will help reduce clogging of infiltration measures and sediment transport through scouring and resuspension during larger spring rains. Execute a municipal street sweeping program to be carried out semi-annually but at least annually within the FBW.

- Maintain a ‘working’ map of all municipally-owned stormwater practices. If maintained in a GIS or other database, the database can also be used to track maintenance services, and to document when certain structures experienced problems.

- The Engineering Department will adopt O&M plans into their regular inspection and maintenance schedule.

- Develop and implement a pet waste bag program for collection and proper disposal of pet waste.

- Develop a program to manage goose populations.

ATTACHMENT A

TOWN OF RIVERHEAD

FLANDERS BAY WATERSHED

RETROFIT PLAN

March 5, 2012

Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200, Ext. 201

RETROFIT PLAN
TOWN OF RIVERHEAD
FLANDERS BAY WATERSHED

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RETROFIT PLAN
TOWN OF RIVERHEAD
FLANDERS BAY WATERSHED

1.0 INTRODUCTION

Pursuant to Section 402 of the Clean Water Act, operators of small municipal separate storm sewer systems (small MS4s), located in urbanized areas and those additionally designated by New York State are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is an NPDES-approved program with permits issued in accordance with the Environmental Conservation Law. In 2010 the New York State Department of Environmental Conservation (NYSDEC) promulgated the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-0-10-002.

Only those small MS4 operators who develop and implement a stormwater management program (SWMP) and obtain permit coverage in accordance with Part II of the SPDES general permit are authorized to discharge stormwater from their small MS4 under this SPDES general permit.

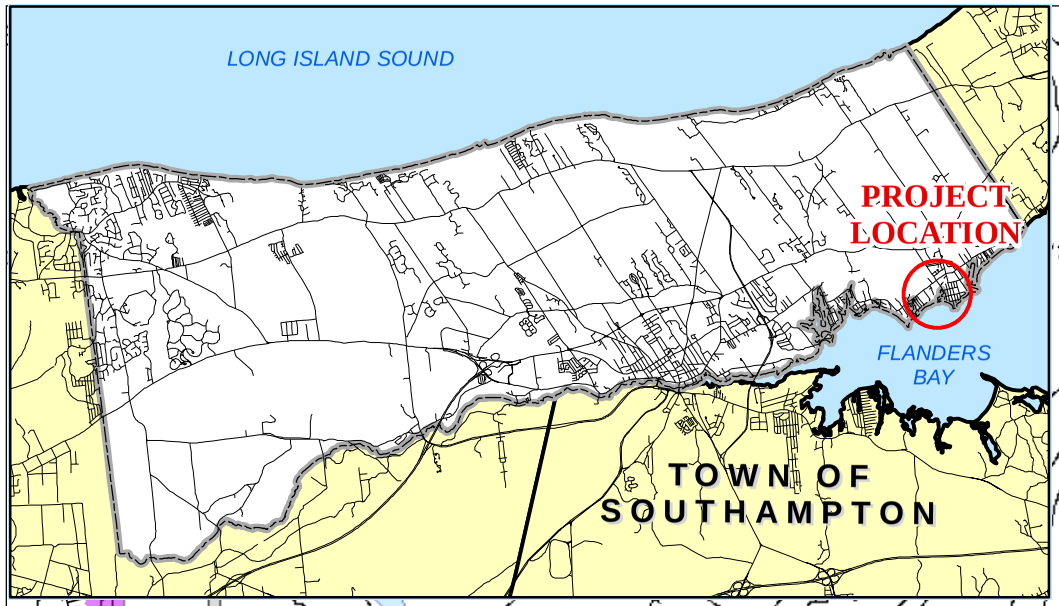
Part III. B. 2. of the permit requires covered entities to meet the pollutant of concern (POC) reduction as defined by the Total Maximum Daily Load (TMDL) program in Part IX of the permit. Deadlines included in Part IX. are for Retrofit Plan Submission, Watershed Improvement Strategy and load reduction of the POC associated with covered entities. Table IX. C. specifies a March 9, 2012 deadline for Retrofit Plan Submission for Pathogens in the Flanders Bay Watershed (FBW). The north side of the FBW is located in the Town of Riverhead (Figure 1.1). Figure 1.1 also provides an overview of the individual sewersheds located within the FBW.

The Retrofit Plan will address runoff from sites to correct or reduce nitrogen loading problems. At a minimum, the Town will:

- Establish procedures to identify sites with erosion and/or nitrogen loading problems;
- Establish policy and procedures for project selection. Selection criteria include the nitrogen reduction potential of a proposed retrofit practice; the ability to use standard, proven technologies; and the economic feasibility of constructing the proposed practice. As part of the project selection process, Suffolk County through the Peconic Estuary Program has initiated the Peconic Estuary Intermunicipal Stormwater Management Project to assist municipalities within the Peconic Estuary to work together in meeting the NYSDEC 2010 MS4 General Permit requirements. The Town is a participant of this project; and
- Establish policy and procedures for project permitting, design, funding, construction and maintenance.

Upon NYSDEC approval of the plan, its requirements will become enforceable tenets of the Town's MS4 Permit.

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Suffolk County Real Property Tax Service
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Figure No. 1 - 1

map of

RETROFIT PLAN
OVERVIEW OF SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

FOX CHASER PL
CURTIS AVE
BAY AVE
WILLOW ST
LOCUST ST
PECONIC BAY BLVD

FIGURE No. 3.1
FIGURE No. 3.2
FIGURE No. 3.3

DATE: 3/1/2012

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

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1.1 Stormwater Programmatic Assessment and Planned Restoration

An examination of diverse stormwater management programmatic measures in the FBW was performed by the Town of Riverhead (the Town). Regular inspections and maintenance are a top priority to ensure long-term function of the stormwater infrastructure. Several public education focus areas and public involvement/participation programs can help improve the health of the watershed. Outreach initiatives will be tailored to target the specific issues in various neighborhoods throughout the watershed including pet and goose waste. Inter-municipal and agency coordination of these proposed restoration efforts are currently developing and can reduce costs and improve effectiveness.

1.2 Stormwater Management Assessment and Proposed BMPs

An assessment of stormwater management and treatment measures in the FBW was performed by the Town in order to identify problem areas and potential sites for the installation of stormwater best management practices (BMPs). The goal of these BMPs is to improve the removal of pathogens before the stormwater runoff reaches Flanders Bay (FB).

2.0 STORMWATER MANAGEMENT PROGRAMMATIC OPPORTUNITIES

2.1 Planned Modifications to Land Development Review Process

The land development review process can be improved to reduce pathogen impacts to FB by implementing comprehensive and uniform stormwater standards for new development and redevelopment. These standards will include explicit stormwater treatment requirements to reduce pathogens and other toxics to FB as well as to improve erosion control. The Town Planning Board could use this set of standards as a uniform reference to improve consistency in stormwater design and management throughout the Town. These standards will be incorporated as a separate policy that can be referenced by the subdivision regulations. More flexibility will be realized to update the policy as technologies advance and conditions change, without having to formally update the subdivision regulations.

The standards could include a pre-approved list of appropriate stormwater best management practices, along with design guidelines for proper siting, sizing, installation and maintenance of the practices. As a starting point, specific sections of the New York State Stormwater Management Design Manual, August 2010 (the Design Manual) will be referenced for stormwater design procedures. This manual provides a set of stormwater practices, sizing and performance criteria, and details acceptable design, limitations, and effectiveness of a host of practices all as provided by the NYSDEC. Those practices that are more effective than others for pathogen removal (e.g., infiltration and constructed wetlands are more effective than swales) will be promoted or required by the Town in lieu of other practices. For example, catch basin inserts (proprietary BMPs gaining popularity in some areas due to easy and low-cost installation) have not been studied sufficiently to estimate pathogen removal, but their operating characteristics indicate that pathogens will not be reduced at significant levels. Refer to the Meetinghouse Creek Watershed Management Plan, Horsley Witten Group, July 2006 (Horsley

Witten, 2006) for more details and references for these findings. BMPs with high pathogen removal capabilities that will be promoted include constructed wetlands and infiltration.

The Design Manual also provides useful landscaping and site layout techniques to reduce pathogen loading to receiving waters, which may be useful to include in the Town's list of practices and standards. The site layout techniques include buffer standards for separating development from surface waters. Buffers are effective for discouraging nuisance geese populations.

Goals:

- Adopt a short, pre-approved list of BMPs effective at pathogen removal.
- Require appropriate landscaping and site layout techniques.

2.2 Planned Maintenance of Stormwater Infrastructure

In the Town of Riverhead, ownership of stormwater infrastructure is shared by the Town and individual landowners. When a new subdivision road is constructed and accepted by the Town, the responsibility for the drainage infrastructure also passes to the Town. The drainage infrastructure that collects and treats stormwater on each individual lot is the responsibility of the landowner to inspect and maintain.

In order to function as designed over the long term, stormwater infrastructure must be maintained regularly. This is particularly important with structures designed for infiltration, such as leaching catch basins, which may receive stormwater that has not been pre-treated and therefore contains oils, greases, organic matter, and suspended sediment that can clog the system. Depending on the land use, inadequate pretreatment may allow for dissolved pollutants to enter groundwater and lead to both health and environmental threats. On individual properties, runoff from rooftops and driveways that is not properly infiltrated into dry wells or other onsite structures could back up into basements, cause nuisance flooding, and in some cases, lead to surface discharges and erosion rather than infiltration.

The following goals are intended to improve the system through maintenance of stormwater practices and infrastructure in the FBW and the Town of Riverhead.

Goals:

- Adopt a regular municipal stormwater inspection and maintenance schedule for municipally-owned stormwater infrastructure. Regular inspections will be performed at least annually in the early spring, prior to the spring rains but after the winter snow melt. Cleanouts of leaching catch basins and other sedimentation practices are recommended to be performed annually, but at a minimum of every 2-3 years, and on an additional as-needed basis. This will help reduce clogging of infiltration measures and sediment transport through scouring and resuspension during larger spring rains. Execute a municipal street sweeping program to be carried out semi-annually but at least annually within the FBW.

- Maintain a 'working' map of all municipally-owned stormwater practices. If maintained in a geographic information system (GIS) or other database, the database can also be used to track maintenance services, and to document when certain structures experienced problems.

- Implement a formal Engineering Department review and approval process of all stormwater management designs for subdivisions and site plan review projects against a set of clearly defined design standards. This will provide consistency among designs, bring designs up to a minimum state-of-the-art standard, and provide applicants with design guidance. The Engineering Department also will formally review and approve all operation and maintenance (O&M) plans for subdivisions that are planned for acceptance by the Town, and then adopt those plans into their regular inspection and maintenance schedule.

- Develop a brief landowner's guide for maintenance of stormwater structures. This guide will focus on inspection and maintenance of on-lot stormwater practices for both residential and commercial/industrial sites. It will also describe things that local landowners can do to assist the Town in maintaining public infrastructure, such as cleaning off debris from around nearby catch basins and reporting stormwater infrastructure malfunctions and flooding problems.
- Terminate the Loose Leaf Pickup program and require all residents to bag leaves for pickup instead. Loose leaf pickup encourages residents to pile leaves along the street edge, which can cause significant clogging of the catch basins and other drainage structures.

2.3 Public Education and Outreach – Planned Focus Areas

An education and outreach campaign will be used to target specific audiences to try to positively influence human behaviors in the watershed with potential ecologic impact. At the same time, the program will reach out to a broad audience to raise awareness that land use and human activity within the watershed have a direct effect on the health and quality of the coastal resources. The key public education issues in the FBW that will help address the key goals of this Retrofit Plan are:

- Goose management;
- Pet waste management;
- Stormwater management; and
- Septic system maintenance.

These focus areas are described below, followed by a description of planned education and outreach programmatic techniques. These techniques are intended to be a menu of strategies that will be employed in various combinations depending on time, budget and target watershed audience.

2.3.1 Goose Management

There are a handful of methods that are used in various situations to reduce the populations of geese in and around waterbodies, thereby reducing pathogen loads to that area. These include

habitat modification, frightening, exclusion, discontinuation of feeding, relocation, hunting, and egg addling. Some of these methods require changes in practices by the landowners in the area, and some require professional or third-party assistance. For example, habitat modification refers to the modification of large expanses of open grassed areas that are often mowed directly to the water's edge. These areas are attractive to geese that like to have a clear sight line and open access to the water. Modifying these open spaces to allow for a vegetated buffer along the water edge makes the area much less attractive to these geese. A 50-foot vegetated buffer, with vegetation growth up to 3-4 feet high, makes a large impact in deterring geese by breaking up the open lawn space from the open water. Creation of this buffer, however, often depends on the will of the land owner to convert mowed area to vegetated area. This is where public education comes into play.

Public education implementation tools include: mailers, television and radio advertisements, and newspaper articles and signage. One common public education method is the implementation of a demonstration project. If there are publicly owned properties along the waterfront, or areas owned by a willing owner, a buffer area of open mowed lawn will be allowed to revegetate, forming at least a 50-foot wide buffer along the water's edge. Photographs and information about the former presence of geese and depicting the look of the former vegetation versus the revegetated area relays important information to a wider audience about both the goal of the program as well as something that they can visualize. Signage describing the area as a goose management buffer will be placed in public view, and then an explanation of the site will be presented in mailers or brochures for others to see. Often it is easier for people to implement something once they know what it will look like. They can then have reasonable expectations about whether it will be effective. Other methods of goose management include live capture of the birds, egg addling, and hunting. Egg addling is a method used to control the hatching of eggs. The eggs in a nest are shaken, making them nonviable, and then replaced in the nest. These methods require permits from the United States Fish and Wildlife Service (USFWS) and may require state or local permits as well. In some cases, these methods may face local opposition; but in severe situations of uncontrolled geese populations, a local municipality may opt for these more direct methods.

2.3.2 Pet Waste Management

Pet waste can be a nuisance to the public in addition to contributing pathogens to a water body when it is washed from the ground surface by rainfall and stormwater runoff. For those people that have pets, picking up after a dog can also be a nuisance. However, more and more people are realizing the aesthetic and environmental health benefits of cleaning up pet waste from public areas and their own back yards. In many communities throughout the country there are now "pooper-scooper" laws requiring people to clean up after their pets. While the idea of picking up after your dog may seem absurd at first, a few pooper-scooper signs, some pooper scooper bags, and the risk of being seen not picking up after your dog can go a long way. A media campaign will be created with a sense of humor to get the message across. In addition, signage at public open spaces and along walking trails can bolster the message.

2.3.3 Stormwater Management

Homeowners and the general public in a watershed can play an important role in the stewardship of the MS4 on a daily basis. This is particularly true in subdivisions, where the stormwater management practices may be isolated from routine Highway Department programs and where small stormwater management practices may be dispersed throughout the subdivision or on individual lots.

A stormwater awareness program developed and implemented through the Town can be a very useful tool in promoting effective and sustainable stormwater management. Mailings and inserts with local billings and other municipal communications to residents can raise awareness and inspire vigilance among local residents. Residents can help to monitor swales, leaching systems, catch basins and discharge locations to ensure proper operation. Residents can report problems to the Highway Department and thus help prevent infrastructure failure. In the fall, residents can help by clearing leaves and debris from the catch basin grates and by not throwing leaves and debris into drainage swales, onto roadways, or into other stormwater pathways.

2.3.4 Septic System Maintenance

Septic systems require regular maintenance and inspection, and require that homeowners are aware of the location and operational characteristics of the system. Most systems necessitate septic tank pumping at approximate three to seven year intervals (depending upon the input to the system and the size of the settling tank) to remove accumulated solids. There are many septic system maintenance additives available to reduce the accumulation of solids and the required frequency of pumping. However, these additives can frequently be harmful to the system, particularly when used inappropriately, by impairing the microbial community responsible for much of a system's treatment ability, by reducing the effectiveness of the leach field, and by contributing chemical contaminants to the underlying groundwater. This is particularly important in coastal areas, e.g., the Town of Riverhead, characterized by sandy soils where groundwater movement to receiving waters can be very rapid. A properly designed, installed, and maintained septic system should not need chemical additives to function properly. It is important for homeowners to be cautious of what is introduced to their septic systems and of the resultant potential effects. Without proper maintenance, the system can lose significant treatment capacity and can clog, causing leachate to breach ground surface. Alternatively, the system could back up into the household. Both of these scenarios cause a public health concern as well as a threat to local water resources.

The Town will initiate a public mailing to promote septic system maintenance by reminding residents of maintenance needs. The New York Onsite Wastewater Training Network at the State University of New York at Delhi provides trainings throughout the state and is a wealth of information about septic systems, including proper siting, design and maintenance. While this program's training is geared primarily toward engineers and practitioners, the New York State Department of Health website provides information and a printable pamphlet aimed at residents that describes proper septic system O&M. This pamphlet will be updated to include references

to local water resources that may be threatened or experiencing poor water quality, and highlight the need for septic system maintenance. The Rhode Island Cooperative Extension has developed a number of helpful fact sheets aimed at homeowners with information about septic system maintenance, ways to prolong the life of the system, ways to upgrade the system to provide better treatment, the effects of additives, and other useful information.

The Suffolk County Department of Health Services has also produced a brochure entitled, "Home Sewage Disposal Systems in Suffolk County", which describes a septic tank and cesspool system that is typical of Suffolk County. This brochure, last updated in 2004, will be improved by the Town to provide additional information in regard to improving on-site wastewater treatment through innovative wastewater design. This would be useful for homeowners, especially those with aging systems (25-30 years old) and in need of significant repair or replacement.

2.4 Public Education and Outreach – Planned Programs

The following provides a menu of activities that will be implemented as part of a watershed-wide outreach and education program to address the environmental health of the coastal water resources of the FBW. These activities are designed to focus on one or a combination of the areas discussed above. These activities could be implemented by each municipality, in conjunction with the Peconic Estuary Program, Suffolk County, homeowners' associations, local schools, or other active citizens groups.

2.4.1 Watershed Awareness Day

Organize a watershed awareness day, perhaps associated with an Earth Day program. The Town will organize a watershed awareness day to take place along the shore or at an open space within the watershed. This could include educational booths, games related to water quality, demonstrations of innovative technologies, sales of rain barrels and native grass seed, a swim or kayak race, a road race through the watershed, and/or an afternoon or evening clambake. This will enable the residents in the watershed to make the visual and experiential connection between the coastal resources and the watershed.

2.4.2 Media Campaigns

A host of media campaigns will be developed with specific messages regarding applicable management strategies such as residential septic system maintenance, repair or replacement; shoreline vegetation management; or pet waste management. These campaigns will include fliers and brochures to be distributed at community events or mailed out with utility bills, as well as posters to be distributed and posted in municipal offices, public libraries, schools, and other highly visible areas. Articles, or a series of articles, will be developed for the local newspaper and will focus on watershed management. Television advertisements or stories on local television stations or the local cable-access stations will be devoted to homeowner activities that impact the watershed. Brochures related to pet waste clean up will be handed out with dog

licenses and distributed by local veterinarians. These efforts will be tied to the public outreach and education requirements of the MS4 permit.

2.4.3 Demonstration Projects

Projects that demonstrate the construction and operation of a vegetated buffer or alternative stormwater management techniques will be constructed on publicly-owned land or on private lots of willing owners. Demonstration projects allow residents to visualize construction and completion of a BMP thus facilitating expectation of the outcome. Once initiated, the planning and implementation phases of the project will be documented in photographs which will be used in mailers, brochures, posters, and a media campaign. These projects can serve as a local news story as well. Signage will be placed at the edge of the site to draw public attention and to provide direction in finding additional information.

2.4.4 School Watershed Science Programs

Science and humanities programs in local schools will help to educate youth on watershed management, and the connection between land uses and water quality in the FBW.

2.5 Public Involvement/Participation in Watershed Management

A public involvement/participation program will reach out to a broad audience to raise awareness that land use and human activity within the watershed have a direct effect on the health and quality of the coastal resources. The key focus area of this program, stormwater management, is described below, followed by a discussion of planned programming techniques. These techniques are intended to be a menu of strategies that will be employed in various combinations depending on time, budget and target watershed audience.

2.6 Public Involvement/Participation – Planned Programs

The following provides a menu of activities that will be implemented as part of a watershed-wide public involvement/participation program to address the environmental health of the coastal water resources of the FBW. These activities are designed to focus on watershed management and will be implemented by the Town in conjunction with the Peconic Estuary Program, Suffolk County, homeowners' associations, local schools, or other active citizens groups.

2.6.1 Institution of an "Adopt-a-Watershed" Organization

Such an organization will be tasked with cleaning up litter, monitoring storm drain outfalls, or promoting watershed stewardship. Monitoring storm drain outfalls will be implemented with simple water quality kits in conjunction with observations. This activity serves as a means to gauge any significant changes that may be occurring in the watershed. Ideally, this activity has the potential to involve children as well.

2.6.2 Demonstration Projects

Projects that demonstrate the construction and operation of a vegetated buffer or alternative stormwater management techniques will be constructed on publicly-owned land or on private lots of willing owners. Demonstration projects allow residents to visualize construction and completion of a BMP thus facilitating expectation of the outcome. Demonstration projects will also include the general public in planning and implementation.

Residents can also install on-site retrofits to improve the stormwater management at private homes. These can include installation of rain barrels to collect water from rooftops through roof leaders. A rain barrel program will be established through the Town or local non-profit organizations, in conjunction with a rain barrel distributor, to sell rain barrels at a discounted price to community members. In addition, other on-site retrofits may include dry well installation to collect and infiltrate roof runoff and overflow from the rain barrels.

2.6.3 Watershed Clean-up Days

Community volunteers will coordinate a watershed clean-up day to pick up litter and debris throughout the watershed. These events will enable the public to observe FB and areas of the watershed with which they are unfamiliar and give them a sense of ownership and stewardship beyond a single clean-up event.

2.6.4 School Watershed Science Programs

Environmental hands-on school programs will include water quality monitoring, gardening, recycling, and composting. These programs will facilitate student involvement/ participation in watershed management and stewardship.

2.7 Summary of Programmatic Restoration Efforts

While this section introduced several programmatic opportunities, regular inspections and maintenance of the stormwater infrastructure will be the top priority. Without a long term inspection/maintenance program in place, any new or existing stormwater BMPs implemented in the watershed will eventually lose effectiveness over time. A BMP is only as effective as its O&M plan. Next, the review process for new development and redevelopment will be amended to require developers to utilize specific BMPs and alternative site design techniques from project inception, reducing potential water quality impacts. Finally, the various public education focus areas and public involvement/participation programs presented above can effectively improve the health of the watershed. No one outreach campaign or participative program will be effective for all neighborhoods. Campaigns and public involvement will be tailored to target the specific issues in various neighborhoods throughout the watershed based on demographics, density, age of the community, etc.

Programmatic costs can pose a problem for some communities. These costs may be reduced and program effectiveness improved by pooling resources with other municipalities and agencies.

Such coordination will be useful for purchasing shared maintenance equipment such as street sweepers and implementing area-wide educational campaigns. To this end Suffolk County through the Peconic Estuary Program has initiated the Peconic Estuary Intermunicipal Stormwater Management Project to assist municipalities within the Peconic Estuary to work together in meeting the NYSDEC 2010 MS4 General Permit requirements. The County project involves the preparation of an intermunicipal agreement, Needs Assessment, Action Plan and Implementation Work Plan to facilitate joint efforts in meeting the MS4 General Permit requirements. The Town is a participant of this project.

3.0 STORMWATER MANAGEMENT ASSESSMENT

This stormwater management assessment addresses stormwater runoff as a source of pathogen loading in the FBW by identifying any problem areas, and potential areas for the installation of stormwater BMPs to reduce the pathogen loading to FB. The results of this assessment are then used to pinpoint and evaluate site specific stormwater management practices in key locations throughout the watershed. By pointing to and prioritizing the most cost-effective retrofit opportunities, a reasonable set of specific management options are available to help achieve the goals stated in the MS4 permit for the FBW. Successful implementation of selected opportunities is expected to help reduce stormwater runoff pollution, improve overall water quality conditions, and maintain or improve critical habitat areas.

The existing stormwater management program in the FBW mainly consists of infiltrating catch basins and storm drains along roadways, as well as recharge basins in subdivisions. Based on this watershed assessment, proposed stormwater BMPs were chosen to retrofit the existing drainage system to better manage and treat stormwater before it reaches FB.

3.1 Assessment Methodology

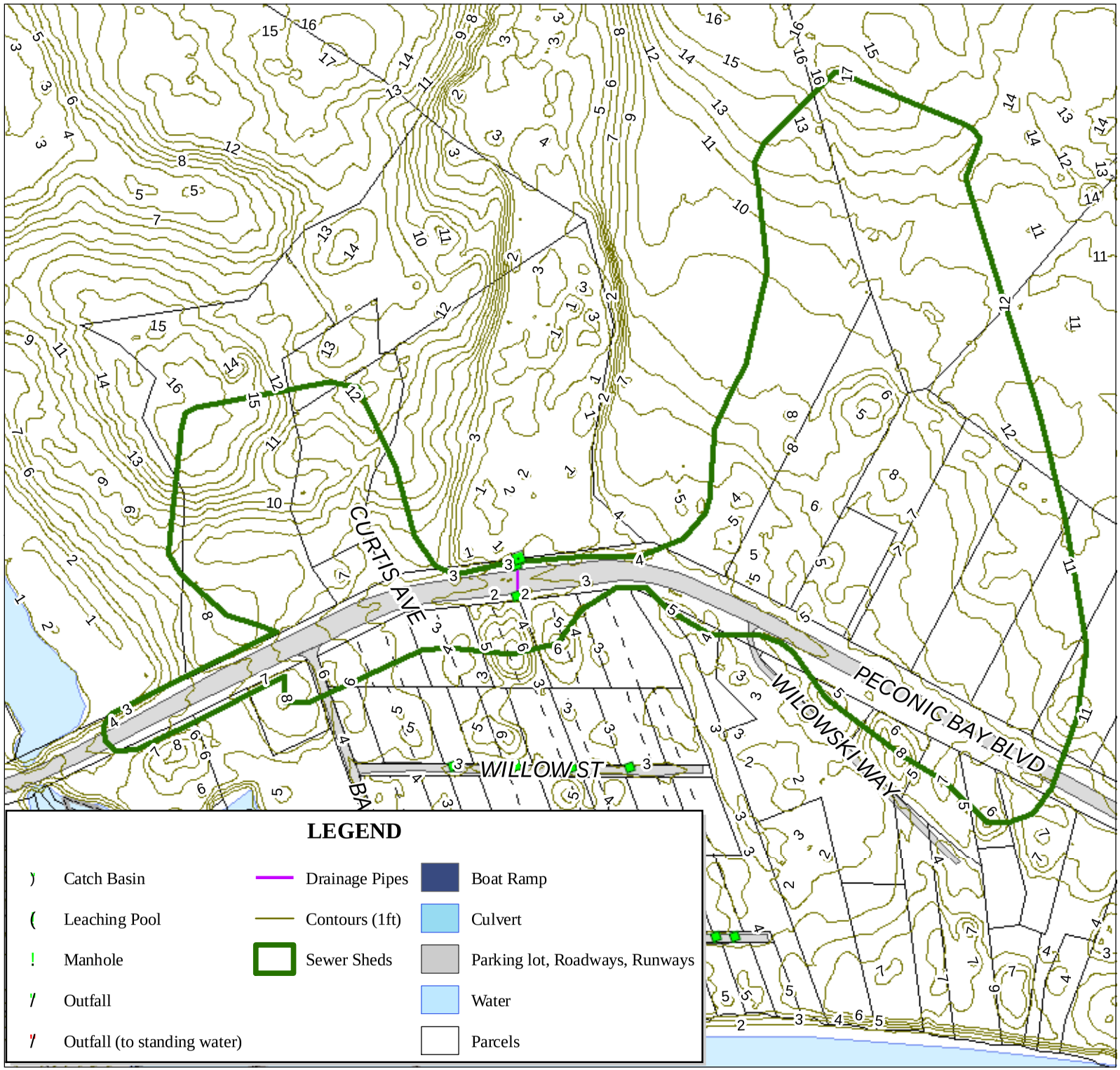
Inventories were conducted during 2010 and 2011 of all outfalls connected to the Town of Riverhead's MS4. Outfalls and associated structures and piping were identified, mapped and input to GIS in conjunction with the inventory. Sewersheds (discrete drainage areas) were then configured with respect to each outfall. The sewersheds, outfalls, piping and structures are shown and labeled in Figures 3.1 through 3.3.

Focused field reconnaissance was also conducted during 2010-2011 in the Town which included the FBW. The sewersheds for the FBW outfalls were updated after completion of this reconnaissance. The results of the reconnaissance efforts were used to investigate areas of potential maximum pathogen loading in the FBW. An opportunity to pre-select sites for the installation of BMPs was subsequently provided based on outfall locations and areas that are open space, publicly owned, and/or untouched.

3.2 Potential Sites and Best Management Practices Selection

The Town reviewed the results of the focused field reconnaissance with the goal of improving the overall water quality of the stormwater discharging to the FBW. Potential locations for the

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Figure No. 3.2

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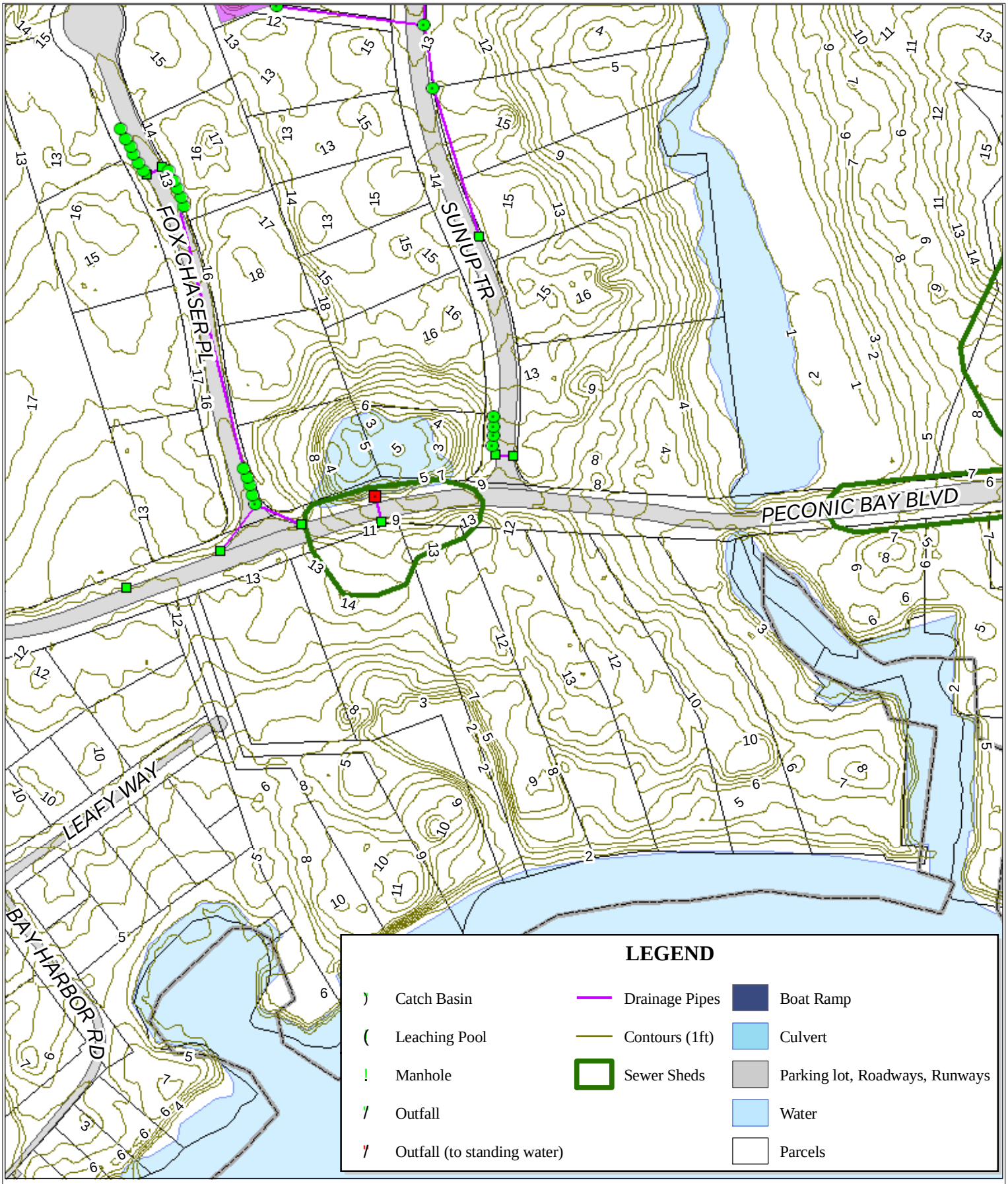
RETROFIT PLAN
INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

DATE: 3/1/2012

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

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DATE: 3/1/2012

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RETROFIT PLAN
INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

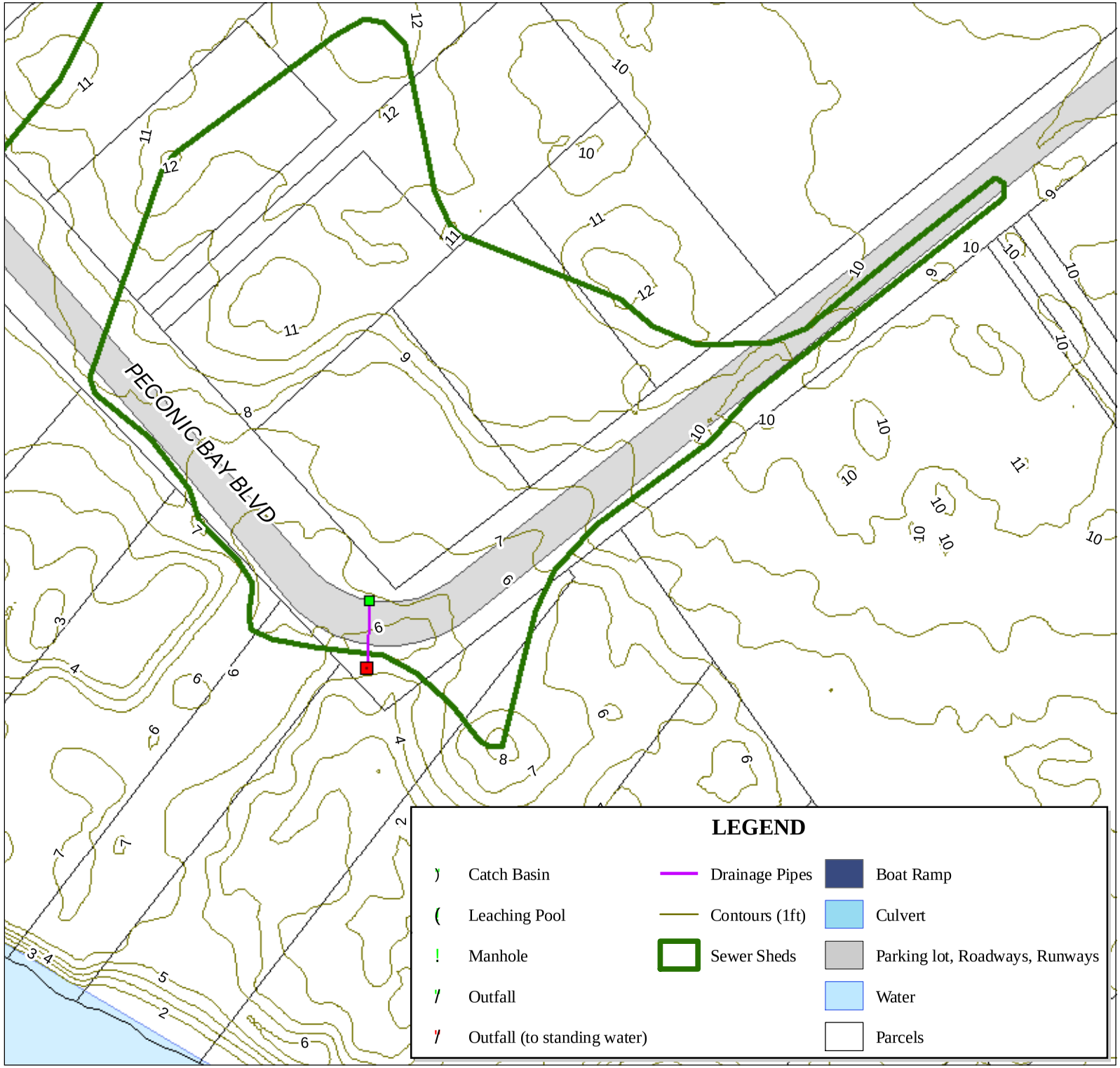
Figure No. 3.1

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Figure No. 3.3

map of

RETROFIT PLAN
INDIVIDUAL SEWER SHEDS
Pathogen Impaired Watersheds
Flanders Bay Watershed

LEGEND

Catch Basin	Drainage Pipes	Boat Ramp
Leaching Pool	Contours (1ft)	Culvert
Manhole	Sewer Sheds	Parking lot, Roadways, Runways
Outfall		Water
Outfall (to standing water)		Parcels

DATE: 3/1/2012

TOWN OF RIVERHEAD

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Riverhead, NewYork 11901

installation of stormwater BMPs were based on land use, parcel ownership (publicly-owned land was targeted as a priority), outfall locations, potential conflicts with existing utilities, effective stormwater capture area, and pollutant source locations.

All of the identified sewersheds included residential neighborhoods. The primary source of pathogens in these neighborhoods is from pets and, to a lesser degree, from geese. Sources of highly concentrated pathogens were not apparent in the areas investigated and as a result BMPs were not selected for installation in the FBW. This decision was further supported by the existence of only one outfall which discharges to a surface water connected directly to FB. This outfall drains two acres of residential and open space area. Because this sewershed is not a potential source of high pathogen concentrations, consideration for installation of a BMP in this area was not pursued. All other sewersheds in the FBW discharge to FB by overland flow or structural overflow, i.e., catch basins, leaching catch basins, recharge basins and depressed areas which accept storm sewer discharges.

4.0 CONCLUSION

Stormwater management and stormwater programmatic assessment were completed for the Flanders Bay Watershed. The results of these assessments as described above found that a proposed retrofit program to address runoff for correcting or reducing pathogen loading problems would be less effective than a programmatic approach. Consequently, the Town proposes the reduction of pathogen loading to the FBW by public education and outreach, public involvement/participation and pollution prevention/good housekeeping.

TOWN OF RIVERHEAD

PECONIC BAY WATERSHED

WATERSHED IMPROVEMENT STRATEGY

April 30, 2012

Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200, Ext. 201

WATERSHED IMPROVEMENT STRATEGY
TOWN OF RIVERHEAD
PECONIC BAY WATERSHED

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FIGURES

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ATTACHMENTS

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WATERSHED IMPROVEMENT STRATEGY
TOWN OF RIVERHEAD
PECONIC BAY WATERSHED

1.0 INTRODUCTION

Pursuant to Section 402 of the Clean Water Act, stormwater discharges from small municipal separate storm sewer systems (small MS4s) located in urbanized areas or additionally designated by New York State are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is an NPDES-approved program with permits issued in accordance with the Environmental Conservation Law. In 2010 the New York State Department of Environmental Conservation (NYSDEC) promulgated the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-0-10-002.

Only those small MS4 operators who develop and implement a stormwater management program (SWMP) and obtain permit coverage in accordance with Part II of the SPDES general permit are authorized to discharge stormwater from their small MS4 under this SPDES general permit.

Part III. B. 2. of the permit requires covered entities to meet the reduction of the pollutant of concern (POC) as defined by the Total Maximum Daily Load (TMDL) program in Part IX of the permit. Deadlines included in Part IX. are for Retrofit Plan Submission, Watershed Improvement Strategy and load reduction of the POC associated with individual covered entities. Table IX. D. specifies a deadline of May 1, 2011 for completion of the Peconic Bay Watershed (PBW) Improvement Strategy. The north side of the PBW is located in the Town of Riverhead (the Town) (Figure 1-1).

In addition to the requirements of Part VII of the MS4 permit, the Town of Riverhead must develop and implement the Minimum Control Measures (MCMs) described below. These MCMs apply to storm sewersheds which are potential sources of nitrogen to the PBW and are located within the Town. The sewersheds, outfalls, piping and structures are shown and labeled in Figure 1-1.

1.1 Stormwater Programmatic Assessment and Goals

An examination of diverse stormwater management programmatic measures in the PBW was performed by the Town. Regular inspections and maintenance are a top priority to ensure long-term function of the Town's stormwater infrastructure. Several public education focus areas and public involvement/participation programs can help improve the health of the watershed. Outreach initiatives will be tailored to target the specific issues in various neighborhoods throughout the watershed. Inter-municipal and agency coordination of these proposed restoration efforts are being developed and can reduce costs and improve effectiveness.

1.2 Stormwater Management Assessment and Goals

An assessment of stormwater management and treatment measures in the PBW was performed by the Town in order to identify problem areas and potential sites for the installation of stormwater best management practices (BMPs). The goal of these BMPs is to improve the

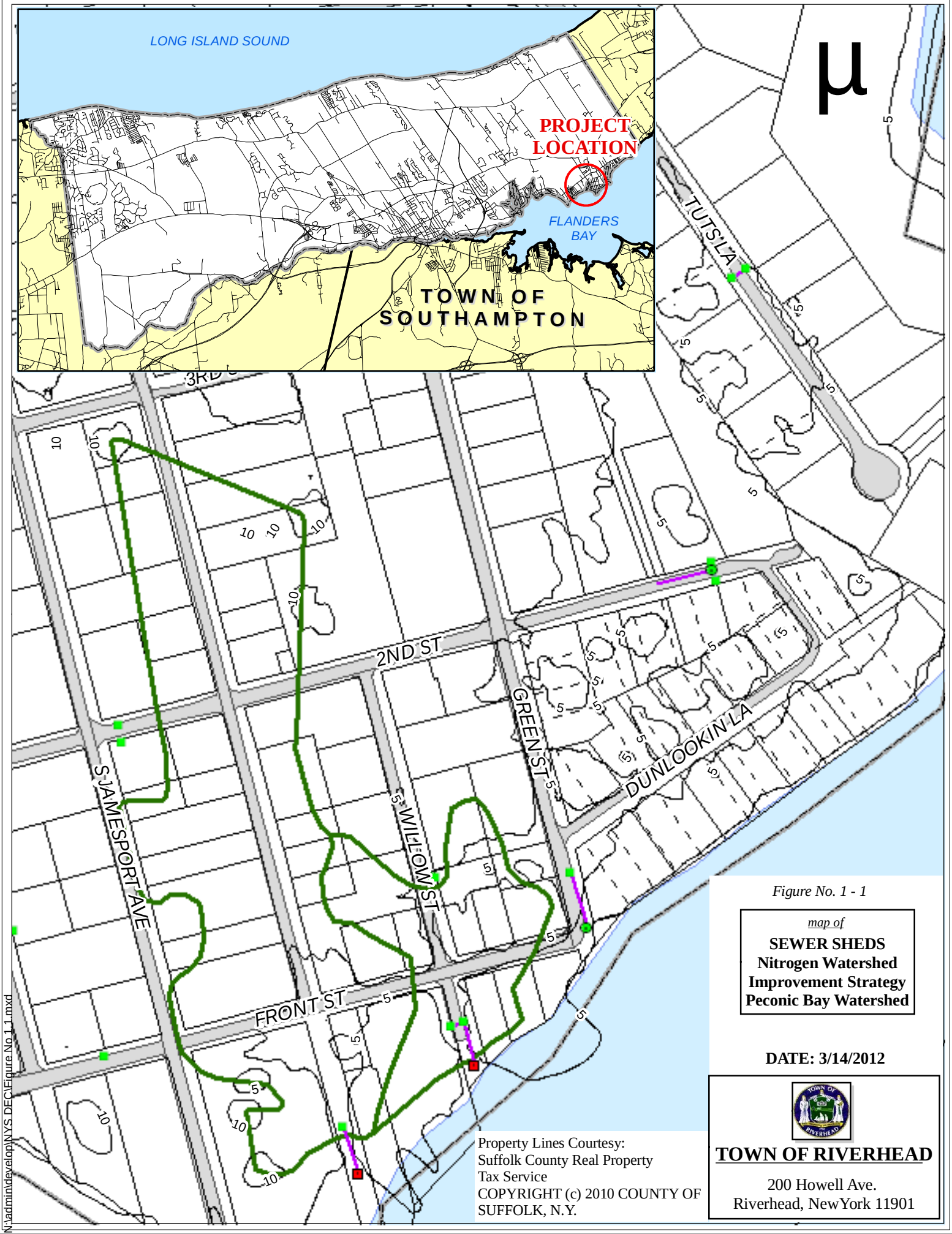


Figure No. 1 - 1

map of

SEWER SHEDS
Nitrogen Watershed
Improvement Strategy
Peconic Bay Watershed

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removal of nitrogen before the stormwater runoff reaches Peconic Bay (PB). The assessment is detailed in the Retrofit Plan included in Attachment A.

Excessive nitrogen loading can damage estuarine ecosystems and cause potentially harmful algal blooms. Where lawns and agricultural areas are regularly fertilized, stormwater runoff can deliver significant amounts of nitrogen to a receiving embayment. A carefully planned and implemented stormwater management plan can successfully limit nitrogen loading to the PBW, reducing overall nitrogen loading and decreasing the occurrence of brown tide.

In addition, requirements for a land developer to assess or mitigate potential nitrogen loading in stormwater runoff from a proposed project are currently not included in Town code. However, revegetation of a buffer area to a surface water body must be carried out with native vegetation and without fertilizers and pesticides. Sources of nitrogen on a site may include septic systems, fertilizers on lawns or stormwater runoff. Traditional on-site septic systems, even those sited properly according to code, contribute nitrogen to the groundwater and, ultimately, to the PB.

2.0 PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS (MCM 1)

2.1 Public Education and Outreach – Planned Focus Areas

An education and outreach campaign will be used to target specific audiences in the watershed to positively influence human behaviors with potential ecologic impact. The program will also raise the awareness of the general public that land use and human activity within the watershed have a direct effect on the health and quality of the coastal resources. The public education issues in the PBW that will help address the key goals of this Watershed Improvement Strategy (WSIS) are as follows:

- Goose population management;
- Pet waste management;
- Stormwater management;
- Septic system maintenance; and
- Fertilizer management.

These focus areas are described below, followed by a description of planned education and outreach programmatic techniques. These techniques are intended to be a menu of strategies that will be employed in various combinations depending on time, budget and target watershed audience.

2.1.1 Goose Population Management

Several methods are used in various applications to reduce the populations of geese in and around water bodies, thereby reducing nitrogen loads to those areas. These include habitat modification, frightening, exclusion, discontinuation of feeding, relocation, hunting, and egg

addling. Some of these methods require changes in land use practices by the property owners, and some require professional or third-party assistance.

Habitat modification refers to alterations of large expanses of open grassed areas that are often mowed to the water's edge. These areas are attractive to geese that rely on a clear line of sight and open access to the water. Modifying these open spaces to allow for a vegetated buffer along the water's edge minimizes the attractiveness to geese. A 50-foot vegetated buffer, with growth up to 3-4 feet in height has a significant impact in deterring geese. The vegetated buffer replaces the transitional open space from the open water. Creation of this buffer, however, often depends on the will of the land owner to convert mowed area to vegetated area which generates the need for public education.

Tools for implementing public education include: mailers, television and radio advertisements, and newspaper articles and signage. Demonstration projects are another common form of public education. An example is allowing a 50-foot-wide buffer area of open mowed lawn along the waterfront to revegetate on publicly owned properties or on private properties of willing owners. Information regarding the former presence of geese, including photographs of the previous vegetation in contrast to the revegetated area, educates a wider audience about the goal of the program. Signage describing the area as a goose management buffer will be placed in public view, and followed by mailers or brochures explaining the project. Visualization of a completed project will streamline implementation by enabling expectations of project effectiveness. Other methods of goose management include live capture of the birds, egg addling, and hunting. Egg addling is a method used to control the hatching of eggs. The eggs in a nest are shaken, making them nonviable, and then replaced in the nest. These methods require permits from the United States Fish and Wildlife Service (USFWS) and may require state or local permits as well. In some cases, these methods may face local opposition; but in severe situations of uncontrolled goose populations, a local municipality may opt for these more direct methods.

2.1.2 Pet Waste Management

Pet waste can be a nuisance to the public in addition to contributing nitrogen to a water body via stormwater runoff. Picking up after a dog can also be a nuisance for pet owners. However, a growing number of pet owners are realizing the aesthetic and environmental health benefits of cleaning up pet waste from public areas and their own back yards.

In many communities throughout the country "pooper-scooper" laws have been enacted which require pet owners to clean up after their pets. Pooper-scooper signs and bags installed in key locations in the sewershed, along with the stigma of adding to the degradation of the watershed by not picking up after one's pet, can have positive long term effects on the watershed. A media campaign will be created with signage posted at public open spaces and along walking trails.

2.1.3 Stormwater Management

Homeowners and the general public within a watershed can play an important daily role in the stewardship of the MS4. This is particularly true in subdivisions where the stormwater

management practices may be isolated from routine Highway Department programs and where small stormwater management practices may be dispersed throughout the subdivision or on individual lots.

A stormwater awareness program developed and implemented through the Town can be a very useful tool in promoting effective and sustainable stormwater management. Mailings and inserts with local billings and other municipal communications to residents can raise awareness and inspire vigilance among local residents. Residents can help to monitor swales, leaching systems, catch basins and discharge locations to ensure proper operation. Residents can report problems to the Highway Department and thus help prevent infrastructure failure. In the fall, residents can help by clearing leaves and debris from the catch basin grates and by not throwing leaves and debris into drainage swales, on roadways, or into other stormwater pathways.

2.1.4 Septic System Maintenance

Many older septic systems consist of leaching pools constructed of either masonry block or pre-cast concrete. A number of the older (25-30 years) masonry block leaching pools are beginning to deteriorate. The Suffolk County Department of Health Services (SCDHS) currently requires that systems designed for less than 1,000 gallons per day incorporate a septic tank that allows solids/liquids separation. It is important to educate the public that septic tanks placed ahead of the leaching pools will serve to reduce the concentration of nitrogen infiltrating through the leaching pools. Septic systems require regular maintenance and inspection, and require that homeowners are aware of the location and operational characteristics of the system. Most systems necessitate septic tank pumping at approximate three to seven year intervals (depending upon the input to the system and the size of the settling tank) to remove accumulated solids.

In addition, many homeowners are not familiar with the signs of a malfunctioning system. The Town has delineated sewersheds in the PBW and will begin code modification with regard to homeowners with septic systems in this watershed. These homeowners will be required to have their systems inspected every five years by a licensed plumber or licensed Professional Engineers. The licensed professional must provide the Town with certification of acceptable system performance. Systems not operating correctly must be repaired or replaced and associated certification furnished to the Town.

There are many septic system maintenance additives available to reduce the accumulation of solids and the required frequency of pumping. However, these additives can frequently be harmful to the system, particularly when used inappropriately. Detrimental effects of using additives inappropriately include impairing the microbial community responsible for much of a system's treatment ability, reducing the effectiveness of the leaching field, and contributing chemical contaminants to the underlying groundwater. These effects are particularly important in coastal areas, e.g., the Town of Riverhead, that are characterized by sandy soils where groundwater movement to receiving waters can be very rapid. A properly designed, installed, and maintained septic system should not need chemical additives to function properly. It is important for homeowners to be cautious of what is introduced to their septic systems and of the resultant potential effects. Without proper maintenance, the system can lose significant treatment

capacity and can clog, causing leachate to breach ground surface. Alternatively, the system could back up into the household. Both of these scenarios cause a public health concern as well as a threat to local water resources.

The Town will initiate a public mailing to promote septic system maintenance by reminding residents of maintenance needs. The New York Onsite Wastewater Training Network at the State University of New York at Delhi provides trainings throughout the state and is a wealth of information about septic systems, including proper siting, design and maintenance. While this program's training is geared primarily toward engineers and practitioners, the New York State Department of Health website provides information and a printable pamphlet aimed at residents that describes proper septic system operation and maintenance (O&M). This pamphlet will be updated to include references to local water resources that may be threatened or experiencing poor water quality, and highlight the need for septic system maintenance. The Rhode Island Cooperative Extension has developed a number of helpful fact sheets aimed at homeowners with information about septic system maintenance, ways to prolong the life of the system, ways to upgrade the system to provide better treatment, the effects of additives, and other useful information.

The SCDHS has also produced a brochure entitled, "Home Sewage Disposal Systems in Suffolk County", which describes a septic tank and cesspool system that is typical of Suffolk County. This brochure, last updated in 2004, will be improved by the Town to provide additional information in regard to improving on-site wastewater treatment through innovative wastewater design. This would be useful for homeowners, especially those with aging systems and in need of significant repair or replacement.

2.1.5 Fertilizer Management

Agricultural Fertilizer Use:

The Town will coordinate the daily operations of local farmers to maintain stormwater runoff, which can potentially carry sediment with adsorbed nutrients, within individual properties. Runoff from farms to surrounding areas will be minimized by crop orientation, properly positioned swales with check dams, and/or sedimentation forebays. Row crops will be oriented perpendicular to flow direction to reduce velocity and allow infiltration. Swales with check dams will be installed along the perimeter of farm fields to collect and slow the runoff to enable sediment deposition and minimize erosion. Finally, forebays will collect, detain, facilitate sediment deposition, and infiltrate mass flows from crop fields.

The Town will organize discussions with farmers to encourage active cooperation with implementing the above practices. These discussions will also serve as an educational venue to describe the potential downstream effects of nutrients from runoff entering surface waters. The Town of Riverhead has experienced these effects with the brown tide in the past. In 2012, the Town will begin developing a database of local farms that will be mapped via geographic information system (GIS) relative to the Town's MS4. The farms will also be sorted by priority based on the potentially greatest effect of pollution and the highest probability of maintaining

sediment on individual properties. The Town will request assistance from the Long Island Farmers Bureau, Cornell Cooperative Extension and the Peconic Estuary Program (PEP) for educating parties involved in agricultural land use, i.e., traditional farmers, sod farms, viticulturists, nurserymen, horticulturists, etc.

Residential Fertilizer Use:

The Town will coordinate presentations with the PEP to educate the public on the effects of nitrogen in waterbodies. Because Long Island is located over a sole source aquifer, excessive levels of nitrogen in the groundwater is detrimental to its use as potable water. Many organic fertilizers are composed of animal waste. Therefore, the net reduction in the quantity of nitrogen generated from organic fertilizers in contrast to inorganic fertilizers is minimal.

Educational programs will be based on encouraging proper use of fertilizer (either organic or inorganic) as well as encouraging landscape practices that will reduce the requirement of fertilizers. Many lawns located within the PBW are maintained over the majority of the available lot area, irrigated with potable water, and treated with fertilizers and herbicides. Some lawns consist of non-native grasses. Public education will be used to help change these practices and inform homeowners about alternative lawn care practices. Smaller lawns are easier to maintain and allow room for larger more diverse and colorful vegetation. The use of native grasses and compost folded into the soil can reduce the need for additional pesticides and herbicides and will provide a more drought-resistant groundcover, which will in turn require less irrigation. In cases where irrigation is still required or preferred, the homeowner can use a variety of methods to reduce irrigation demand, including rain barrels or cisterns to catch rooftop runoff for irrigation, or programmed irrigation systems to water their lawns only during early morning or late evening hours.

There are several example programs in the northeast that promote healthy and sustainable lawn management. The Rhode Island Cooperative Extension GreenShare Program (http://www.uri.edu/ce/ceec/greenshare.html) and the URI Nonpoint Education for Municipal Officials (NEMO) Healthy Landscapes program (http://www.uri.edu/ce/healthylandscapes/index.html) provide guidance on sustainable gardening and lawn maintenance to promote the use of native vegetation that is suitable for the soil and site conditions.

A program such as the Bayscapes Program in the Chesapeake Bay Watershed is a good example. This program provides guidance to homeowners and landowners within the Chesapeake Bay Watershed about developing and installing “Bayscapes,” which are landscapes other than turf that are selected to reduce irrigation demand, improve habitat, reduce non-point pollution, and reduce erosion, while also appealing to gardeners. This program uses a website (http://www.fws.gov/chesapeakebay/bayscapes.htm), fact sheets and examples to provide information.

In Westchester County, New York, the Grassroots Healthy Lawn Program was an initiative of the county government and a non-profit organization called Grassroots Environmental

Education, based in Port Washington on Long Island. The goal of this initiative was to promote healthy lawn management by reducing the use of pesticides and other toxins on lawns throughout the county. The program provided training to landscapers, provided public outreach services, served as a liaison between manufacturers and retailers, and developed a list of natural lawn care product suppliers for public distribution (http://www.ghlp.org/).

Commercial Fertilizer Use:

The Town will solicit the cooperation of design professionals when designing new facilities. Xeriscaping will be stressed to reduce lawn areas and increase native plantings with perennials and more mulching. The Town will also contact golf course owners and/or superintendants to induce effective land management resulting in a reduction in the amount of fertilizers placed. Property owners will be asked to incorporate landscaping options that both reduce the amount of fertilizers required and dissuade the congregation of Canadian Geese.

2.2 Public Education and Outreach – Planned Programs

The following menu of activities will be implemented as part of the PBW outreach and education program to address the environmental health of the coastal water resources. These activities are designed to focus on one or a combination of the areas discussed above. These activities will be implemented by the Town in conjunction with the PEP, Suffolk County, homeowners' associations, local schools, or other active citizens groups.

2.2.1 Watershed Awareness Day

The Town will organize a watershed awareness day, preferably in conjunction with an Earth Day program. The watershed awareness day will take place along the shore or at an open space within the watershed. This event could include educational booths, games related to water quality, demonstrations of innovative technologies, sales of rain barrels and native grass seed, a swim or kayak race, a road race through the watershed, and/or an afternoon or evening clambake. A watershed awareness day will enable residents to make the visual and experiential connection between the coastal resources and the watershed.

2.2.2 Media Campaigns

Media campaigns will be developed with specific messages regarding applicable management strategies such as shoreline vegetation management. These campaigns will include fliers and brochures to be distributed at community events or mailed with utility bills, as well as posters to be distributed and posted in municipal offices, public libraries, schools, and other highly visible areas. Brochures could inform the public that sources of nitrogen include animal wastes, agricultural fertilizers from farms, general purpose fertilizers from residences, commercial fertilizers from golf courses, businesses and municipalities and human waste from overflowing septic systems. Articles will be developed for submittal to the local newspaper and will focus

on watershed management. Television advertisements or stories on local television stations or the local cable-access stations will be devoted to homeowner activities that impact the watershed.

2.2.3 Institution of an "Adopt-a-Watershed" Organization

Organizations sponsoring "Adopt-a-Watershed" programs will clean up litter, monitor storm drain outfalls, or promote watershed stewardship. Monitoring storm drain outfalls will be implemented with simple water quality kits in conjunction with observations. These organizations serve to gauge any significant changes that may be occurring in the watershed and may involve children as well.

2.2.4 Demonstration Projects

Projects that demonstrate the construction and operation of a vegetated buffer or alternative stormwater management technique will be constructed on publicly-owned land or on private lots of willing owners. Alternative stormwater management techniques include rain gardens, native plant selection, practical turf areas, efficient irrigation, mulch use, and nitrogen-reducing maintenance. Demonstration projects allow residents to visualize construction and completion of a BMP thus facilitating expectation of the outcome. One example could involve a smaller, more natural lawn and yard with more diverse landscaping. Information could be provided about cost savings and time savings due to lower maintenance requirements, and about any increase in song birds, decrease in nuisance species, etc.

Once initiated, the planning and implementation phases of the project will be documented in photographs which will be used in mailers, brochures, posters, and a media campaign. These projects can serve as local news stories as well. Signage will be placed at the edge of the site to attract public attention and to provide direction in finding additional information.

2.2.5 School Watershed Science Programs

Science and humanities programs in local schools can help to educate youth on watershed management and the connection between land uses and water quality in the PBW.

3.0 PUBLIC INVOLVEMENT/PARTICIPATION IN WATERSHED MANAGEMENT (MCM 2)

A public involvement/participation program will provide hands-on opportunities to inform the general public within the PBW that land use and human activity have a direct effect on the health and quality of the coastal resources.

3.1 Public Involvement/Participation – Planned Programs

The public involvement/participation program in the PBW involves implementation of a menu of activities to address environmental health of the coastal water resources. These activities are

designed to focus on watershed management and will be implemented by the Town in conjunction with the PEP, Suffolk County, homeowners' associations, local schools, or other active citizens groups. These activities will be employed in various combinations depending on time, budget and target watershed residents.

3.1.1 Demonstration Projects

Demonstration projects will include the general public during planning and implementation. Residents can also install on-site retrofits to improve stormwater management at private homes. These can include installation of rain barrels to collect water from rooftops through roof leaders. A rain barrel program will be established through the Town or local non-profit organizations, in conjunction with a rain barrel distributor, to sell rain barrels at a discounted price to community members. In addition, other on-site retrofits may include dry well installation to collect and infiltrate roof runoff and overflow from the rain barrels.

3.1.2 Watershed Clean-Up Days

Community volunteers will coordinate a watershed clean-up day to collect litter and debris throughout the watershed. These events will enable the public to observe the PB and areas of the watershed with which they are unfamiliar and give them a sense of ownership and stewardship beyond a single clean-up event.

3.1.3 School Watershed Science Programs

Environmental hands-on school programs will include water quality monitoring, gardening, recycling, and composting. These programs will facilitate student involvement/participation in watershed management and stewardship.

4.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) (MCM 3)

4.1 MS4 Conveyance System Mapping

The Town has developed and currently maintains a map developed with GIS software which shows the entire Town's identified MS4 conveyance system. The map for the conveyance system includes the following information:

- Identification of closed pipe or open drainage conveyance systems;
- The material, shape and size of closed pipe systems;
- The lining material, shape and dimensions for channels or ditches in an open drainage system;
- Drop inlet, catch basin, and manhole locations; and
- The number and size of connections (inlets/outlets) to catch basins and manholes with the direction of flow.

5.0 POST-CONSTRUCTION STORMWATER MANAGEMENT (MCM 5)

5.1 Planned Modifications to Land Development Review Process

The land development review process will be improved to reduce potential impacts to the water quality in PB. These improvements include implementing the use of comprehensive and uniform stormwater standards for new development and redevelopment. The standards will include explicit stormwater treatment requirements to reduce nitrogen and suspended solids loading to the PB as well as to improve erosion control. The Planning Board will use this set of standards as a uniform reference to improve consistency in stormwater design and management throughout the Town. These standards will be incorporated as a separate policy that can be referenced by the subdivision regulations and allow more flexibility to update the policy as technologies advance and conditions change. As an added benefit the subdivision regulations would not need formal modifications.

The new stormwater standards will include a pre-approved list of appropriate stormwater BMPs, along with design guidelines for proper siting, sizing, installation and operation and maintenance (O&M) of the practices. As a starting point, specific sections of the New York State Stormwater Management Design Manual (NYSDEC, August 2010) (Design Manual) will be the general reference for stormwater design. This manual provides a set of stormwater practices, sizing criteria and performance criteria, and describes in detail the proper design, limitations, and effectiveness of a host of practices. Those practices that are more effective than others for nitrogen removal (e.g., infiltration and constructed wetlands are more effective than swales) will be promoted or required by the Town in lieu of other practices. For example, some research studies have shown that catch basin inserts (proprietary BMPs gaining popularity in some areas due to easy and low-cost installation) have low removal rates for nitrogen, high maintenance burdens for communities, and should be implemented sparingly. Refer to the Meetinghouse Creek Watershed Management Plan, Horsley Witten Group, July 2006 (Horsley Witten, 2006) for more details and references for these findings. BMPs with high nitrogen removal capabilities that will be promoted include constructed wetlands and infiltration.

The Design Manual also provides useful landscaping and site layout techniques to reduce nitrogen loading to receiving waters, which may be advantageous to include in the Town's list of practices and standards. The site layout techniques include buffer standards for separating development from surface waters. Buffers are effective for controlling nitrogen-containing runoff from turf areas.

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<u>Goals:</u>

- Adopt a short, pre-approved list of BMPs effective at nitrogen removal.
- Require appropriate landscaping and site layout techniques.

5.2 Planned Maintenance of Stormwater Management Practices

The Town will develop a brief landowner's guide for maintenance of stormwater structures. This guide will focus on inspection and maintenance of on-lot stormwater practices for both residential and commercial/industrial sites. The guide will also describe measures that local landowners can implement to assist the Town in maintaining public infrastructure, such as cleaning debris from nearby catch basins and reporting stormwater infrastructure malfunctions and flooding problems.

5.3 Retrofit Plan

The post-construction stormwater management measures described above are also included in Attachment A to this Watershed Improvement Strategy - Retrofit Plan – along with other additional measures. The Retrofit Plan addresses runoff from sites to correct or reduce nitrogen loading problems. At a minimum, the plan:

- Establishes procedures to identify sites with erosion and/or nitrogen loading problems;
- Establishes policy and procedures for project selection. Selection criteria include the nitrogen reduction potential of a proposed retrofit practice; the ability to use standard, proven technologies; and the economic feasibility of constructing the proposed practice. As part of the project selection process, Suffolk County through the PEP has initiated the Peconic Estuary Intermunicipal Stormwater Management Project to assist municipalities within the Peconic Estuary to work together in meeting the NYSDEC 2010 MS4 General Permit requirements. The Town is a participant of this project; and
- Establishes policy and procedures for project permitting, design, funding, construction and maintenance.

Upon NYSDEC approval of the plan, its requirements will become enforceable tenets of the Town's MS4 Permit.

6.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (MCM 6)

6.1 Planned Maintenance of Stormwater Infrastructure

In the Town of Riverhead, ownership of stormwater infrastructure is shared by the Town and individual landowners. When a new subdivision road is constructed and accepted by the Town, the responsibility for the drainage infrastructure also passes to the Town. The drainage infrastructure that collects and treats stormwater on each individual lot is the responsibility of the landowner to inspect and maintain.

In order to function as designed over the long term, stormwater infrastructure must be maintained regularly. This is particularly important with structures designed for infiltration such as leaching catch basins. These types of structures may receive stormwater that has not been pre-treated and therefore contains oils, greases, organic matter, and suspended solids that can

clog the system. Depending on the land use, inadequate pretreatment may allow nitrogen to enter groundwater and lead to both health and environmental threats. On individual properties, runoff from rooftops and driveways that is not properly infiltrated into dry wells or other onsite structures could back up into basements, cause nuisance flooding, and in some cases, lead to surface discharges and erosion.

The Town maintains a working map of municipally-owned stormwater practices in GIS, spreadsheet and textual formats. This database can also be used to track maintenance services, and to document when certain structures experienced problems.

The following goals are intended to improve the system through maintenance of stormwater practices and infrastructure in the PBW and throughout the Town of Riverhead.

Goals:

- Adopt a regular municipal stormwater inspection and maintenance schedule for municipally-owned stormwater infrastructure. Regular inspections will be performed at least annually in the early spring, prior to the spring rains but after the winter snow melt. Cleanouts of leaching catch basins and other sedimentation practices are recommended to be performed annually, but at a minimum of every 2-3 years, and on an additional as-needed basis. This will help reduce clogging of infiltration measures and sediment transport through scouring and resuspension during larger spring rains. Execute a municipal street sweeping program to be carried out semi-annually but at least annually within the PBW.

- The Engineering Department will adopt O&M plans into their regular inspection and maintenance schedule.

6.2 Loose Leaf Pickup Program

As of 2012, the Loose Leaf Pickup program has been terminated and all residents are required to bag leaves for pickup in lieu of the Loose Leaf program. Loose leaf pickup encourages residents to pile leaves along the street edge, which can cause significant clogging of the catch basins and other drainage structures.

ATTACHMENT A

TOWN OF RIVERHEAD

PECONIC BAY WATERSHED

RETROFIT PLAN

March 15, 2012

Engineering Department
Town of Riverhead
1295 Pulaski Street
Riverhead, NY 11901
(631) 727-3200, Ext. 201

RETROFIT PLAN
TOWN OF RIVERHEAD
PECONIC BAY WATERSHED

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RETROFIT PLAN
TOWN OF RIVERHEAD
PECONIC BAY WATERSHED

1.0 INTRODUCTION

Pursuant to Section 402 of the Clean Water Act, stormwater discharges from small municipal separate storm sewer systems (small MS4s) located in urbanized areas or additionally designated by New York State are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York's State Pollutant Discharge Elimination System (SPDES) is an NPDES-approved program with permits issued in accordance with the Environmental Conservation Law. In 2010 the New York State Department of Environmental Conservation (NYSDEC) promulgated the SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-0-10-002.

Only those small MS4 operators who develop and implement a stormwater management program (SWMP) and obtain permit coverage in accordance with Part II of the SPDES general permit are authorized to discharge stormwater from their small MS4 under this SPDES general permit.
Part III. B. 2. of the permit requires covered entities to meet the reduction of the pollutant of concern (POC) as defined by the Total Maximum Daily Load (TMDL) program in Part IX of the permit. Deadlines included in Part IX. are for Retrofit Plan Submission, Watershed Improvement Strategy and load reduction of the POC associated with individual covered entities. Table IX. D. specifies a March 9, 2011 deadline for Retrofit Plan Submission for Nitrogen in the Peconic Bay Watershed (PBW). The north side of the PBW is located in the Town of Riverhead (Figure 1-1).

1.1 Stormwater Management Assessment and Proposed BMPs

A field assessment for stormwater management value was conducted throughout the FBW. The stormwater assessment was used to identify likely stormwater pollutant sources as well as areas where best management practices (BMPs) could be installed to improve the management and treatment of stormwater in the watershed. Successful implementation of this plan is expected to help reduce stormwater runoff pollution, and maintain or improve overall water quality conditions and degraded marsh areas.

2.0 STORMWATER MANAGEMENT ASSESSMENT

This stormwater management assessment addresses stormwater runoff as a source of nitrogen loading in the PBW. The assessment assists in identifying any problem areas, and potential areas to install stormwater BMPs to reduce the nitrogen loading to PB. The results of this assessment are then used to pinpoint and evaluate site specific stormwater management practices in key locations throughout the watershed. By pointing to and prioritizing the most cost-effective retrofit opportunities, a reasonable set of specific management options are available to help achieve the goals stated in the MS4 permit for the PBW. Successful implementation of selected opportunities is expected to help reduce stormwater runoff pollution, improve overall water quality conditions, and maintain or improve critical habitat areas.

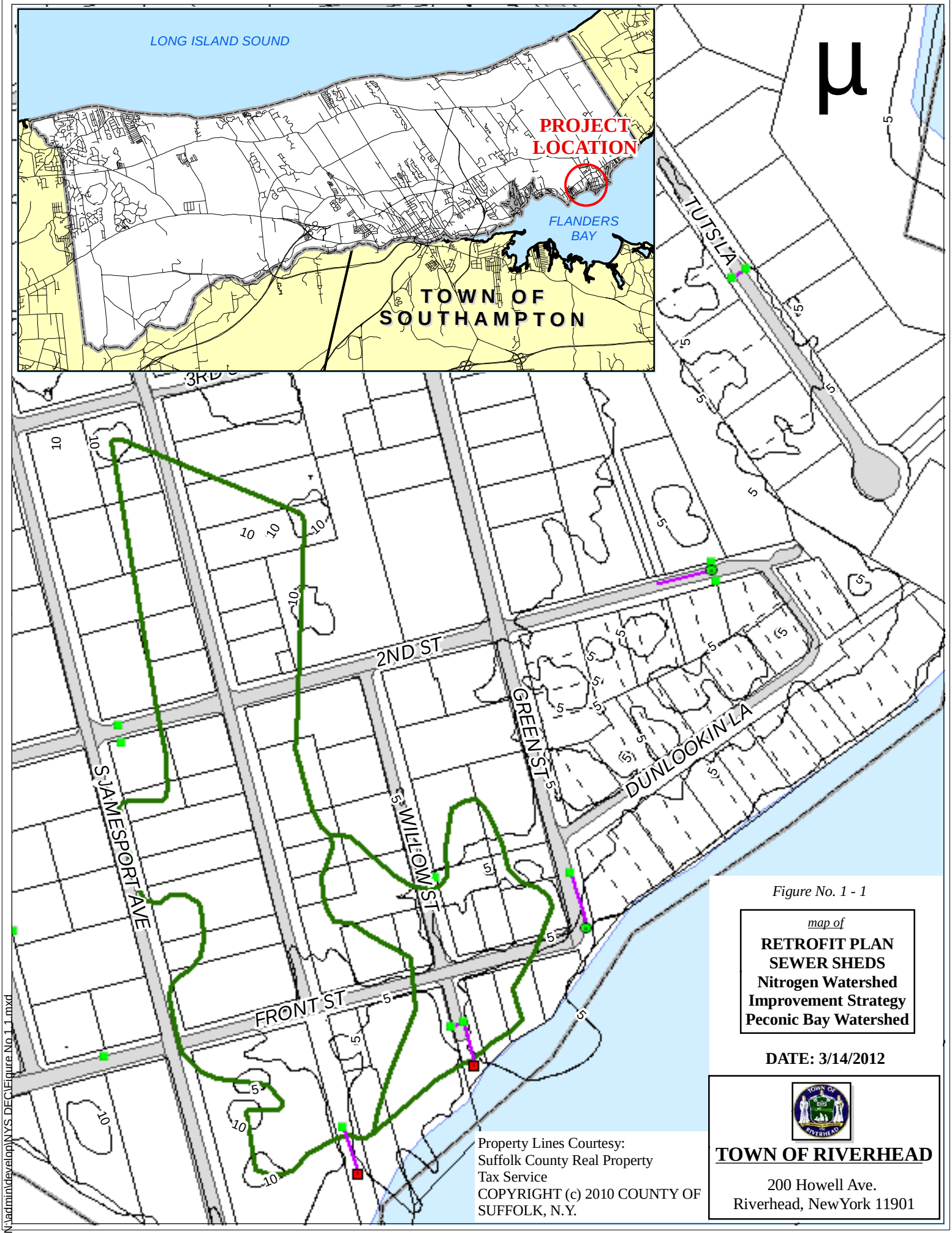


Figure No. 1 - 1

map of

RETROFIT PLAN
SEWER SHEDS
Nitrogen Watershed
Improvement Strategy
Peconic Bay Watershed

DATE: 3/14/2012

Property Lines Courtesy:
Suffolk County Real Property
Tax Service
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TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

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The existing stormwater management program in the PBW mainly consists of infiltrating catch basins and storm drains along roadways, as well as recharge basins in subdivisions. Based on this watershed assessment, proposed stormwater BMPs were chosen to retrofit the existing drainage system to better manage and treat stormwater before it reaches PB.

2.1 Storm Drainage Assessment and Mapping

Inventories of all outfalls connected to the Town of Riverhead's MS4 were conducted during 2010 and 2011. The outfalls and associated structures and piping were identified, mapped and input to GIS. Sewersheds (discrete drainage areas) were then configured with respect to each outfall based on the topography included in GIS. The sewersheds, outfalls, piping and structures which discharge directly to the PBW are shown and labeled in Figure 1-1.

Focused field reconnaissance was also conducted during 2010-2011 in conjunction with the outfall inventories and included the PBW. The sewersheds for the PBW outfalls were updated to reflect field conditions after completion of this reconnaissance. The results of the reconnaissance efforts were used to investigate areas of potential maximum nitrogen loading in the PBW. An opportunity to pre-select sites for the installation of BMPs was realized based on geographical locations of the outfalls and areas that are open space, publicly owned, and/or untouched.

2.2 Description of BMP Design Criteria

The BMPs for the two existing discharge locations in the PBW were selected and designed with the goal of improving the overall quality of the stormwater runoff to the PB.

Based on the New York State Stormwater Management Design Manual (NYSDEC, August 2010) (Design Manual), potential BMPs were sized to capture and treat 90% of the average annual stormwater runoff volume or the Water Quality Volume (WQv). Potential BMPs were sized to capture and treat the 1.2-inch storm event runoff from the contributing impervious areas to the maximum extent practicable.

All practice selection occurs under the conservative assumption that no other BMP is being implemented simultaneously. The pollutant removal efficiency estimated for each BMP is based on the assumption that all practices are implemented independently. However, if feasible, combinations of BMPs will be implemented jointly to address as large an area as possible to achieve a greater cumulative pollutant reduction at the outfall.

The BMPs proposed for the PBW watershed include bioretention systems and porous pavement.

2.3 Selected BMP Descriptions

The following are descriptions of the two selected BMP sites identified for the PBW. BMPs were chosen to match site characteristics with recommended design criteria. The main characteristics that determine the type of BMP chosen include depth to groundwater, watershed area, available land space, and drainage system or other infrastructure constraints.

2.3.1 BMPs for End of Point Street

This proposed practice is located at the south end of Point Street. The sewershed consists of approximately 8.3 acres, of which 40% is estimated to be impervious. The practice is located within the public right-of-way associated with Point Street. Area residents visiting or observing the beach park their cars at this location and walk their dogs here as well. Runoff is collected in the catch basin at the end of the street and discharged to the beach.

Porous pavement with bioretention cells along each side of the street are sized for a 0.8-inch rainfall. The porous pavement and bioretention cells would begin at the south end of Point Steet and extend to the intersection with Front Street. Any surplus runoff from the proposed BMPs would collect and flow to the catch basin at the end of the street for subsequent discharge to the beach. Signage will be installed in this area to remind dog owners to pick up after their pets.

The major constraints for this site are the limited pollution removal based on space limitations. The estimated cost for the porous pavement, bioretention and both BMPs combined is $125,000, $185,000 and $310,000, respectively. The Town plans to secure funding for this project with outside grant monies. The conceptual design for this BMP is included in Figure 2-1.

2.3.2 BMP for End of Willow Street

This proposed BMP is located at the south end of Willow Street. The sewershed consists of approximately 2.2 acres, of which 40% is estimated to be impervious. The practice is located within the public right-of-way associated with Willow Street. Area residents visiting or observing the beach park their cars at this location and walk their dogs here as well. Runoff is collected in the catch basin at the end of the street and discharged to the beach.

Porous pavement sized for a 1.2-inch rainfall is proposed for this location from the south end of Willow Steet to the intersection with Front Street. Any surplus runoff from the porous pavement will discharge to the catch basin at the end of the street for subsequent discharge to the beach. Signage will be installed in this area to remind dog owners to pick up after their pets.

The estimated cost for the porous pavement is $80,000. The Town plans to secure funding for this project with outside grant monies. The conceptual design for this BMP is included in Figure 2-2.

3.0 CONCLUSION

An assessment of stormwater management and treatment in the PBW was performed in order to identify problem areas and potential sites for the installation of stormwater BMPs. The goal of these BMPs is to improve the removal of nitrogen before the stormwater runoff reaches the PB. As there are only two outfalls that discharge directly to the PB within the PBW, both locations were selected for BMP implementation. Stormwater BMPs proposed for these sites include bioretention systems and porous pavement. The goal of the BMPs at these locations is to improve the removal of nitrogen before the stormwater eventually reaches PB. If both proposed

retrofits were implemented, the total cost including design, permitting and construction is estimated to be $390,000.

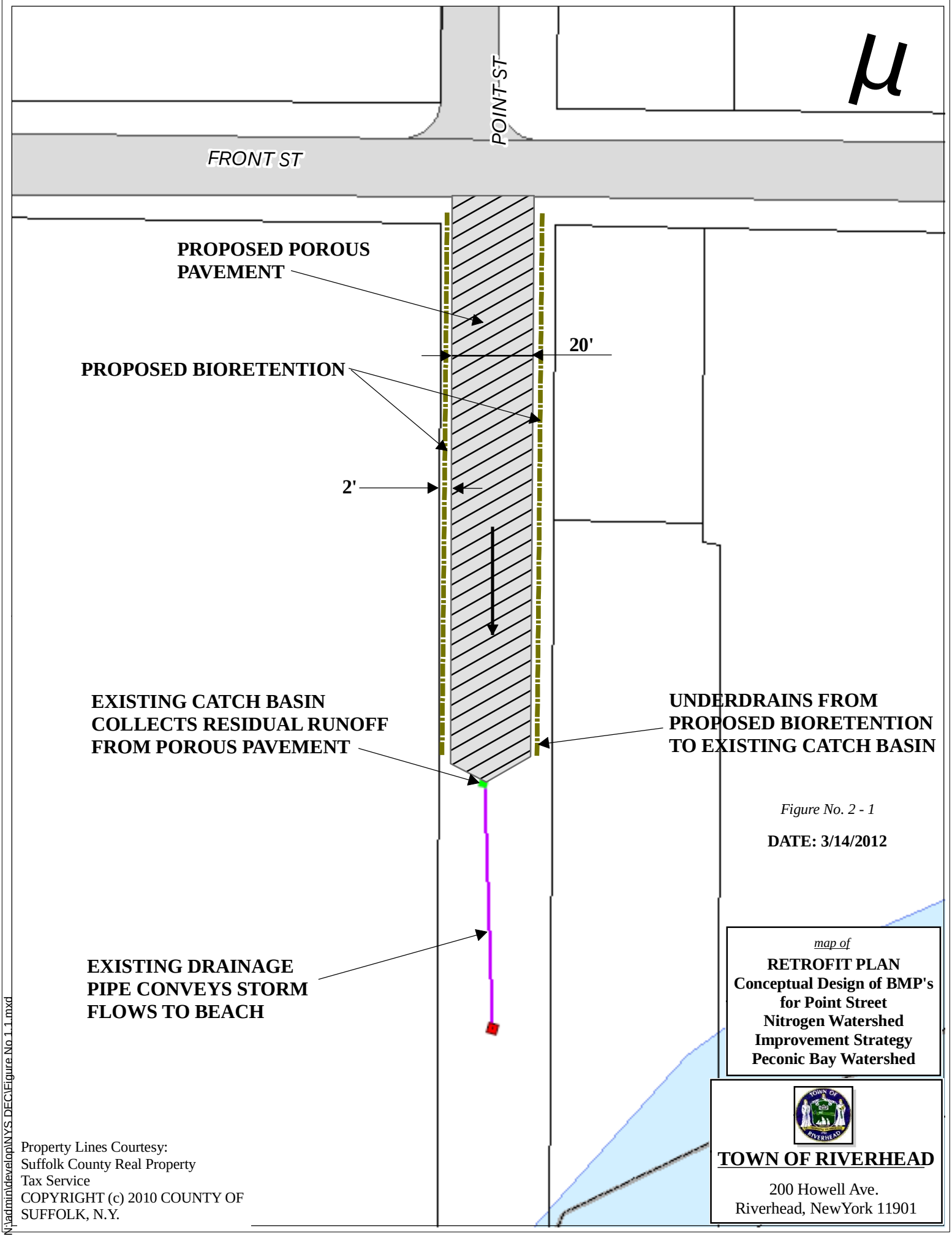


Figure No. 2 - 1

DATE: 3/14/2012

map of

RETROFIT PLAN
Conceptual Design of BMP's for Point Street
Nitrogen Watershed Improvement Strategy
Peconic Bay Watershed

TOWN OF RIVERHEAD

200 Howell Ave.
Riverhead, NewYork 11901

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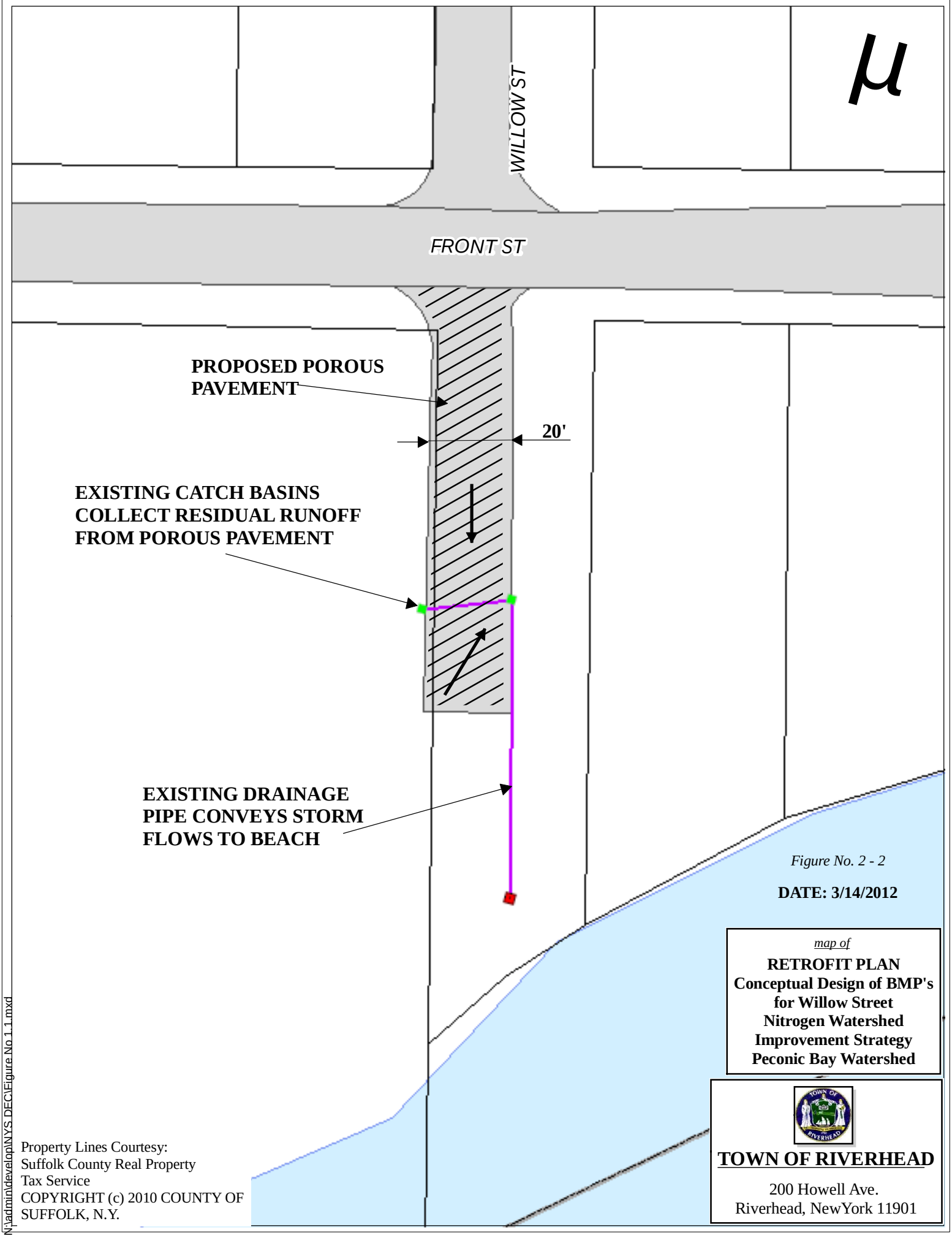


Figure No. 2 - 2

DATE: 3/14/2012

map of

RETROFIT PLAN
Conceptual Design of BMP's
for Willow Street
Nitrogen Watershed
Improvement Strategy
Peconic Bay Watershed

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Riverhead, NewYork 11901

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