# Greene County, NY 2,200 kW Solar PV System

# **Stormwater Pollution Prevention Plan**

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Notice of Intent (NOI) SWPPP Preparer Certification Owner/Developer Certification Notice of Termination (NOT) NYSDEC SPECS General Permit GP-0-15-002

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Site Plans and Details Prepared by LRC Group

# **1** Introduction

# **1.1 Project Description**

The proposed project consists of the installation of a 2,200 kW solar PV system, with associated equipment pad, surrounded by a chain link fence. The project area is approximately 9.7 acres on the Greene County property located in Cairo, Greene County, New York. The site is undeveloped and bordered by Volunteer Drive to the north, the Shingle Kill to the east and neighboring wooded properties to the south and west.

The solar arrays will be installed utilizing post driven into the ground and the solar panel racks are mounted to the posts. The end of each array will include an approximately 2 foot wide trench for the underground electrical connection to the power invertor. The arrays are elevated the on structural posts, minimizing new impervious area. Due to the topography of the site grading will be required.

# **1.2 Relevant Standards and Guidelines**

The erosion and sediment control measures have been designed to minimize soil loss, retain eroded soil, and prevent it from reaching water bodies or adjoining properties. The following documents were utilized in the design process:

- New York State Department of Environmental Conservation, SPDES General Permit for Stormwater Discharges From Construction Activity, Permit No. GP-0-15-002, effective January 29, 2015, expiration date January 28, 2020;
- New York State Department of Environmental Conservation, Division of Water, New York State Standards and Specifications for Erosion and Sediment Control, August 2005; and
- New York State Stormwater Management Design Manual, January 2015.

# 2 Site Characteristics

# 2.1 Location

The site is located at 84 Volunteer Drive, Cairo, Greene County, New York. The property is identified as Tax Parcel 101.00-6-5.1 according to the Greene County Tax Map. The coordinates of the center of the site are 582142E, 4682823N, in NYTM Units. A USGS site location map is included in Appendix A

# 2.2 Existing Land Use

The site is currently undeveloped with portions of it wooded.

# 2.3 Topography

The drainage patterns of the site are split by a ridge line with a portion of the site sloping toward the east and a portion sloping toward the west. Slopes ranging from approximately 2% to 40%.

# 2.4 Soils

According to the Greene County Soils Survey and USDA Web Soil Survey the following soils groups are present onsite, a complete soils report can be found in Appendix A.

Soils Map Unit Symbol	Soils Map Unit Name	Description	Hydrologic Soils Group
LcC	Lackawanna and Wellsboro	Channery loams, 3 to 15 percent slopes, very stony	С
MaC	Maplecrest	Gravelly silt loam, rolling	В
MaD	Maplecrest	Gravelly silt loam, 15 to 25 percent slopes	В

## Table 1: On-Site Soils

# 2.5 Watershed Designation

According to the New York State Department of Environmental Conservation EAF Mapper, the site is located within the Middle Hudson Watershed.

# 2.6 Receiving Waters

The site is bordered to the east by the Shingle Kill, a tributary to the Catskill Creek.

# 2.7 Aquifer

According to the New York State Department of Environmental Conservation EAF Mapper, the site is located in an unnamed principal aquifer.

# 2.8 Wetlands and Waterbodies

According to the New York State Department of Environmental Conservation EAF Mapper, and the U.S. Fish and Wildlife Service, National Wetlands Inventory, the site does not contain wetlands or other waterbodies

# 2.9 Floodplains

The site is located adjacent to, but not within the 100 year floodplain of the Shingle Kill, per the FEMA, Greene County, New York FIRM Map Number 36039C0242F, effective Date May 16, 2008.

# 2.10 Rare, Endangered, or Threatened Species

According to the New York State Department of Environmental Conservation EAF Mapper, the site does not contain any species of plant or animal that is listed by the federal government of NYS as endangered or threatened, nor contain any areas identified as habitat for an endangered or

threatened species. In addition the site does not contain any species of plan tor animal listed by NYS as rare or as a species of special concern.

# 2.11 Historical and Cultural Resources

The site has been review by the New York State Parks, Recreation, and Historic Preservation. Correspondence, located in Appendix A, from the New York State Parks, Recreation, and Historic Preservation confirms the proposed project will have no impact on archaeological and/or historic preservation.

# 2.12 Disturbance and Impervious Cover

The total project area and land disturbance is approximately 9.7 acre. This includes underground electrical conduit installation, surface grading, tree removal, installation of a pervious access road, and the proposed permanent impervious surface. Although the project temporarily disturbs a large amount of land, the increase in imperious cover is 0.02 acres. The pre-developed impervious cover is 0.16 acres and the post-developed imperious cover is 0.18 acres. The post-developed impervious cover consisting of solar panel mounting poles, transformer pads, and fence post. Because of the small amount of increase in impervious cover, the runoff characteristics will not be significantly changed.

Because the solar arrays are pole mounted, the project meets the utility electrical transmission project category of New York State Stormwater Management Design Manual, Appendix B, Table 1. This category indicates, a SWPPP which only includes Erosion and Sediment Controls is required, provided the project does not include the construction of permanent access roads or parking areas surfaced with impervious cover. A small portion of the existing access road to the site requires re-grading, and the installation of a geo-grid with #2 stone. Guidance from NYS DEC has indicated this type of access road construction shall be considered pervious, thus meeting the conditions for a SWPPP which only includes Erosion and Sediment Controls. No stormwater management is required, or proposed.

# **3** Construction Sequence

## Pre-Construction Activities

- 1. Identify all natural resources and mark and protect them as necessary i.e. trees, vegetation, limits of disturbance.
- 2. Identify on-site and downstream surface water bodies and install controls to protect them from sedimentation.
- 3. Establish temporary stone construction entrance pads to capture mud and debris from the tires of construction vehicles.
- 4. Install perimeter sediment controls such as silt fences, as shown on the project plans.
- 5. Install temporary construction fencing as shown on the project plans or as directed by the site engineer.
- 6. All earth disturbances during this phase should be limited to work necessary to install erosion and sedimentation controls.

## During Construction Activities

- 1. All site activities shall have a maximum of five acres of disturbed soil at any one time.
- 2. Stabilize the conveyance system i.e. ditches, swales, berms etc. by seeding, mulching and installing rock check dams as shown on the plans or direct by the site engineer during construction.
- 3. Utilize practices to infiltrate stormwater runoff as much as possible when applicable.
- 4. Stabilize all stormwater runoff outlets as shown on the project plans and as necessary.
- 5. Limit soil disturbance to small areas and preserve as much of the existing vegetation as practical
- 6. Complete all underground utility improvements prior to installation of hard surface improvements.
- 7. All topsoil stockpiles should be staged in an area away from surface waters and storm drains and should be protected and stabilized.
- 8. Earth disturbance is not allowed in established buffers, within any regulated distance from wetlands. Or within the high water line of a body of water affected by tidal action or other such protected zones.
- 9. At any location where surface run-off from disturbed or graded areas may flow off-site, sedimentation control measures must be installed to prevent sedimentation from being transported.
- 10. Immediately stabilize soils with seed and mulch upon completion of work. Limit the amount of disturbed soil to the extent possible.

## Post-Construction Activities

- 1. Completely stabilize all surfaces with seed and mulch or impervious cover. Do not leave any exposed soil.
- 2. After site work is completed perform routine inspection and maintenance and insure proper vegetative cover is maintained at the site.

# 4 Pollution Control

# 4.1 Erosion and Sediment Controls

The following Erosion and Sediment Control measures will be utilized on site as pollution control during construction. Refer to the Erosion and Sediment Control Plans prepared by the LRC Group for the location and details of the measures.

## Stabilized Construction Entrance

A stabilized construction entrance will be used at all points of construction ingress and egress from a public right of way, street, alley, sidewalk, or parking area to reduce the tracking of mud or dirt onto the surrounding roads.

## Silt Fence

A temporary barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil. The purpose of a silt fence is to reduce runoff velocity and effect deposition of transported sediment load.

### Temporary Soil Stockpile

Materials, such as topsoil, will be temporarily stockpiled (if necessary) on the site during the construction process. Stockpiles should be located in an area away from storm drainage, water bodies and/or courses, and will be properly protected from erosion by a surrounding silt fence barrier.

## Dust Control

Water trucks will be used as needed to control of dust resulting from land-disturbing activities, to prevent surface and air movement of dust from disturbed soil surfaces that may cause health hazards, and traffic safety problems.

## **Temporary Seeding and Mulch Stabilization**

Areas undergoing clearing or grading and any areas disturbed by construction activities where work has temporarily or permanently ceased shall be stabilized with temporary vegetative cover within seven days from the date the soil disturbance activity ceased.

A coarse plant residue or chips, or other suitable materials, will be applied to cover the soil surface to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch is also used alone on in non-growing months.

#### **Dewatering**

Dewatering shall be used to intercept sediment-laden storm water or pumped groundwater and allow it to settle out of the pumped discharge prior to being discharged from the site. Water from dewatering operations shall be treated to eliminate the discharge of sediment and other pollutants. Water resulting from dewatering operations shall be discharged through a silt bag, temporary sediment trap or basin, or sheet flow across a stabilized vegetated surface.

#### Permanent Seeding and Stabilization

Re-establishment of vegetative cover shall occur at the completion of construction. A seed mix shall be provided over the land in accordance with the Erosion and Sediment Control Plans prepared by the LRC Group. All areas at final grade must be seeded and mulched within 14 days after completion of the major construction activity. All seeded areas should be protected with mulch.

Final site stabilization is achieved when all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

## 4.2 Other Pollutant Controls

The following practices will be utilized to ensure pollutant control.

#### Solid Waste

No solid materials are allowed to be discharged from the site with stormwater. All solid waste shall be collected and placed in containers. The containers will be emptied periodically by a contract trash

disposal service and hauled away from the site. The contractor shall walk the site daily and pick up any waste or liter and dispose of them properly.

## Temporary Sanitary Facilities

Temporary sanitary facilities shall be provided throughout construction. They must be utilized by all construction personnel and will be serviced by a licensed NYSDEC waste management company. These facilities must comply with state and local sanitary or septic system regulations.

## 4.3 Construction Best Management Practices

Throughout construction the following best management practices shall be followed by the contractor.

## Material Stockpile

Material resulting from the clearing and grubbing operation can be stockpiled on-site and up slope from adequate sedimentation controls during construction. If there is any excess material once construction is complete, it shall be hauled and stored at an off-site location to be coordinated with the Owner. The topsoil from this site shall be stripped and stockpiled for re-use during the restoration stage.

#### Spill Prevention and Response

A Spill Prevention and Response Plan shall be developed for the site by the Contractor. The plan shall detail the steps needed to be followed in the event of an accidental spill and shall identify contact names and phone numbers of people and agencies that must be notified.

The plan shall include Safety Data Sheets (SDS) for all materials to be stored on-site. All workers onsite will be required to be trained on safe handling and spill prevention procedures for all materials used during construction. Regular tailgate safety meetings shall be held and all workers that are expected on the site during the week shall be required to attend.

#### Equipment Cleaning and Maintenance

The Contractor shall designate areas for equipment cleaning, maintenance, and repair. The Contractor and subcontractors will utilize those areas. The areas shall be protected by a temporary perimeter berm and shall be identified.

#### Material Storage

Construction materials shall be stored in a dedicated staging area or the designated "laydown" area. The staging area shall be located in an area that minimizes the impacts of the construction materials effecting storm water quality.

Chemicals, paints, solvents, and other toxic material must be stored in waterproof containers. Except during application, the contents must be kept within storage facilities. Runoff containing such material must be collected, remove from the site, treated, and disposed of at an approved solid waste or chemical disposal facility.

# **5** SWPPP Responsibilities

It is the responsibility of the Owner/Developer, General Contractor and subcontractors to comply with the measures set forth in this SWPPP and implement pollutant control measures which retain surface

water quality and prevent sediment laden runoff from entering rivers, streams, estuaries, wetlands and other sensitive environments. The following outlines the responsibilities of all participants.

# 5.1 Owner/Developer or Qualified Representative

The following is a summary of the Owner/Developer or Qualified Representative's responsibilities:

### Preconstruction Phase

- 1. Prepare this SWPPP using good Engineering practices, best management practices and in compliance with NYSDEC Phase II Storm Water Regulations. The Owner/Developer, contractor and all subcontractors involved in earth disturbance during construction must certify this Plan by signing the certifying statement.
- 2. Prepare and sign the NOI and certify the SWPPP for submission to the NYSDEC at least 5 days prior to commencement of construction. The NOI should be submitted to:

"Notice of Intent" NYSDEC Bureau of Water Permits 625 Broadway Albany, New York 12233-3505

- 1. Provide copies of the SWPPP and the "Acknowledgement of Notice of Intent" to the local government agencies having jurisdiction or regulatory control over the project.
- 2. Review the site prior to the beginning of construction and certify in an inspection report that the appropriate pre-construction erosion and sediment control measures outlined herein, and that are required by the NYSDEC SPDES General Permit, have been installed and will operate as designed.

#### Construction Phase

- 1. Conduct on-site inspections every 7 days for general compliance with the SWPPP and the NYSDEC SPDES General Permit. Inspection reports will be provided to the Owner/Developer within 24-hours of the field inspection. Any problem areas or areas in need of additional stabilization shall be made clear to the Owner/Developer. The Owner/Developer and the authorized person who is responsible for the overall operation of the site, such as a project manager or site superintendent, must certify these reports by signing the certifying statements contained at the end of the reports and must be maintained in the on-site log book as described below.
- 2. Review onsite Contractors SWPPP records to ensure compliance and update them as required or necessary.
- 3. Update the SWPPP each time there is a significant modification to the design or construction which may have a significant effect on the potential for discharge of pollutants into receiving waters.

- 4. When the Owner/Developer receives a letter of "Acknowledgement of Notice of Intent" from the NYSDEC, post a copy of this letter at the site for public viewing on a kiosk, in a construction field trailer, in model home, etc. A copy should also be forwarded to the Owner/Developer's Qualified Representative for the project file
- 5. Post at the site SWPPP inspection activity log for public viewing on a monthly basis.
- 6. Ensure that a log book, containing all the required documentation, is kept on site and made available for inspection upon request. The book should contain an extra copy of the "Acknowledgement of Notice of Intent", a copy of this SWPPP report, weekly SWPPP inspection reports, SWPPP inspection quarterly reports and a copy of the SPDES General Permit.
- 7. Ensure the SWPPP report, inspection reports and inspection quarterly summaries are certified by an authorized person who has responsibility for the overall operation of the site such as a project manager or site superintendent. Certification of these documents is executed by signing the certifying statements and at the end of the inspection reports.
- 8. Require the contractor and all subcontractors involved with construction activity that disturbs site soils, to fully implement the SWPPP and the requirements set forth in the SPDES General Permit. The SWPPP should be certified by the contractor and all subcontractors involved with earth disturbance during construction by signing the certifying.
- 9. When construction is complete, provide the Owner/Developer with certification that an inspection has been completed verifying that the site has undergone final stabilization.
- 10. When the site has undergone final stabilization, prepare the Notice of Termination (NOT) for the Owner/Developer for submission to the NYSDEC.
- 11. Upon project completion and when the site has reached final stabilization, the Owner/Developer should sign the Notice of Termination (NOT) prepared by the Owner/Developer's Qualified Representative and submit to:

"Notice of Termination" NYSDEC Bureau of Water Permits 625 Broadway Albany, New York 12233-3505

12. Retain all site records and documentation including Engineering reports, SWPPP reports, SWPPP inspection reports and all records of data used to complete the NOI for a minimum of 5 years from the date the site reached final stabilization.

# 5.2 Contractors and Sub-Contractors

The following is a summary of the Contractor's responsibilities:

- 1. Implement fully the SWPPP while following the Phasing Plan and the requirements set for thin the SPDES General Permit. Certify the SWPPP by signing the Contractor's Certification statement.
- 2. Provide the names and addresses of all subcontractors' involved in construction activities that disturb site soils for inclusion in the SWPPP. Ensure all subcontractors involved in construction activities that disturb site soils implement fully the SWPPP and the requirements set forth in the SPDES General Permit. All Sub Contractors must certify the SWPPP by signing the Contractor's Certification statement.
- 3. Conduct inspections on a regular basis of the erosion and sedimentation controls installed at the site. Maintain and repair as necessary all erosion and sedimentation controls.

# 5.3 Participant Contact Information

Owner/Developer's Engineer LRC Engineering & Surveying, PC 85 Civic Center Plaza, Suite 103 Poughkeepsie, NY 12601 (845) 243-2880

<u>SWPPP Preparer</u> SolarCity Corporation Rebecca L. Koze, CPESC 100 N. 18<sup>th</sup> Street, Suite 1900 Philadelphia, PA 19103 215-287-4398

Owner/Developer's Qualified Representative – Construction SolarCity Corporation 3055 Clearview Way San Mateo, CA 94402 301-328-8802

> Contractor & Subcontractors To Be Determined

# 6 Implementation, Maintenance, and Inspection

# 6.1 Training

All on-site personnel involved in site-development activities shall be aware of the stipulations outlined in this SWPPP as it pertains to their everyday activities. All such employees must be able to recognize potential problems and have the ability to provide either temporary or permanent stabilization measures, as appropriate, to mitigate stormwater runoff before problems occur. The NYSDEC periodically holds workshops on erosion and sediment control. It is recommended that the

affected and responsible on-site personnel attend these workshops to ensure training is current and up to date. Contact the NYSDEC for more information.

# 6.2 Preconstruction Inspection

Prior to the commencement of construction, a qualified professional designated by the Owner/Developer shall conduct an assessment of the site and certify that the appropriate erosion and sediment control measures have been adequately installed and implemented. The Contractor shall contact the Owner/Developer designated qualified professional once the erosion and sediment control measures have been installed.

A qualified professional is defined as a Professional Engineer or Landscape Architect licensed to practice in New York State, or is a Certified Professional in Erosion and Sediment Control (CPESC).

# 6.3 Construction Phase Inspections

Once construction begins regular inspection of construction activities by the Owner/Developer designated qualified professional are required at least once every 7 days to ensure deficiencies regarding erosion and sedimentation are reported and corrected. It is the responsibility of the Contractor to continuously monitor construction activities to ensure the measures outlined in this report are being implemented.

Areas which have not been fully stabilized, areas used for materials storage and all structural control measures must be inspected once every 7 calendar days to monitor erosion and assess the risk of sedimentation. For sites where soil disturbance activities are on-going and the owner 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 Owner/Developer designated qualified professional 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. For areas 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 (30) calendar days.

The purpose of site inspections is to assess performance of pollutant controls. Based on these inspections, the Owner/Developer designated qualified professional will decide whether it is necessary to modify the Final SWPPP, add or relocate sediment barriers, or whatever else may be needed in order to prevent pollutants from leaving the site via storm water runoff. The contractor has the duty to cause pollutant control measures to be repaired, modified, maintained, supplemented, or whatever else is necessary in order to achieve effective pollutant control.

A copy of the SWPPP must be maintained on site at all times in the field log book. The SWPPP and inspection reports must be maintained on site and be made available to the permitting authority upon request.

# 6.4 Maintenance

It shall be necessary to maintain all temporary controls installed as well as vegetative measures throughout the site. Maintenance shall also be necessary to ensure the permanent structural features, such as underground chambers, catch basins and conveyance piping remain optimally functional and continue to reduce the risk of sediment loading of surface water bodies. All controls shall be repaired or replaced as necessary and as noted on the inspection reports as prepared by the Owner/Developer designated qualified professional.

During construction, maintenance of these stabilization measures shall be the responsibility of the Contractor or appropriate Subcontractors. Vegetative plantings must not be allowed to become overgrown. Vegetation shall be removed should it be ineffective and be replaced with a variety of grasses, trees and shrubs more suitable for preventing stormwater runoff. Silt fences must be inspected regularly to ensure that they are still effective and their capability to reduce stormwater runoff has not been reduced due to prolonged sun exposure. Guidelines and recommendations for installation and maintenance practices can be found in the "New York Guidelines for Urban Erosion and Sediment Control" handbook.

# 6.5 Reports

Inspection/maintenance reports shall be prepared prior to and during construction in accordance with the schedule outlined herein and in the SPDES General Permit GP-0-015-002 Part IV.C.2. The reports shall be prepared to identify and document the maintenance of the erosion and sediment control measures.

Specifically, each inspection shall record the following information:

- 1. Date and time of inspection.
- 2. Name and title of person(s) performing inspection.
- 3. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection.
- 4. A description of the condition of the runoff at all points of discharge (including conveyance systems and overland flow) from the construction site. This shall include identification of any discharges of sediment from the construction site.
- 5. Identification of all erosion and sediment control practices that need repair or maintenance.
- 6. 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 repaired.
- 7. 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.
- 8. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices.

9. Include color photographs with date stamp, taken with a digital camera that clearly shows the condition of all practices that have been identified as needing corrective actions. Color copies of photographs shall be attached to the inspection report within 7 calendar days of inspection. Color photographs with date stamp, taken with a digital camera must clearly show the condition of practice(s) after the corrective action has been completed. Color copies of the photographs, that document completion of the corrective action work within 7 calendar days of inspection, shall be attached to inspection report.

# 6.6 Post Construction Records and Archiving

At the time of final stabilization, the Owner/Developer's Qualified Representative shall perform a final inspection of the site and certify that the site has successfully undergone final stabilization using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls such as silt fence, not needed for long term use, have been removed. At this point, the Owner/Developer is responsible for the following:

- 1. Submit to the NYSDEC a NOT prepared by the Owner/Developer's Qualified Professional.
- 2. Transfer the Water Quality and Quantity Report and SWPPP to the New Owner/Developer.

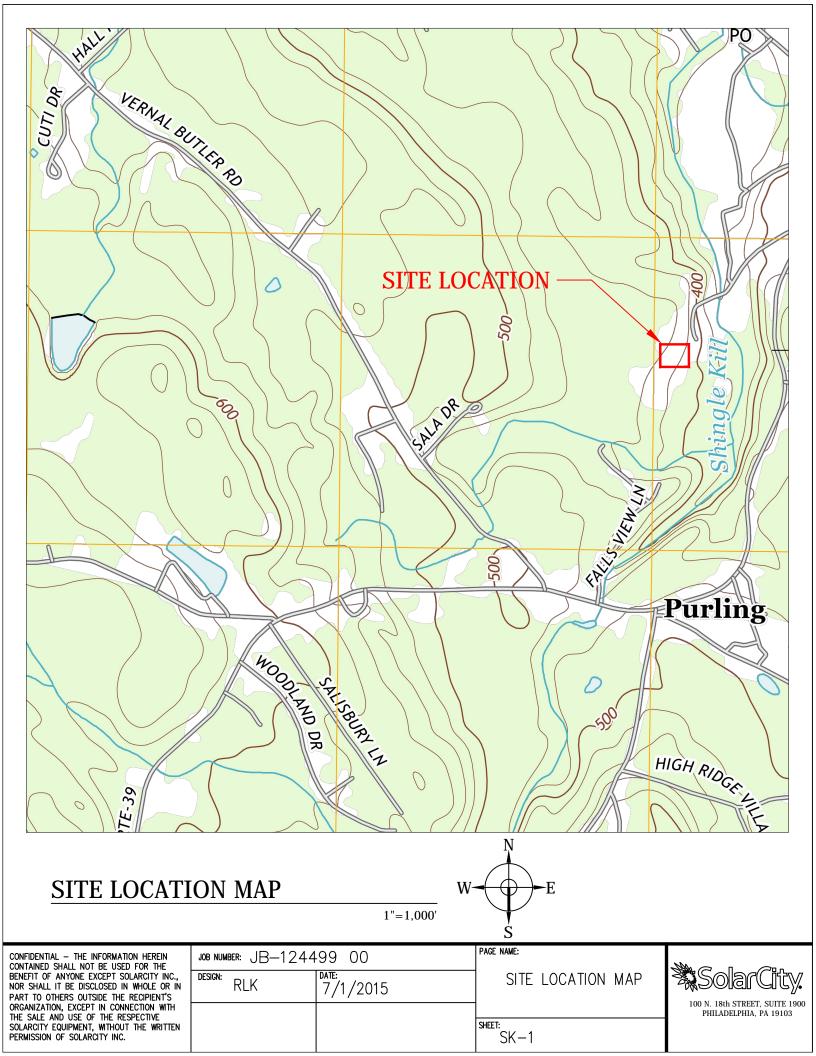
Following construction, the Owner/Developer shall retain copies of the Final SWPPP, the complete construction Site Log Book, and records of all data used to complete the NOI to be covered by this permit, for a period of at least five years from the date that the site is finally stabilized. This period may be extended by the NYSDEC, at its sole discretion, at any time upon written notification.

# 7 Conclusions

This project is not subject to the requirements of a regulated MS4, and this SWPPP has been prepared in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control as well as considerations for quantity control as identified by NYS Stormwater Management Design Manual. As such the proposed development will not adversely impact adjacent or downstream properties if the erosion and sediment control facilities are properly constructed for the duration of the temporary use and the site is restored and re-vegetated as specified.

Appendix A

Site Characteristics Information





USDA United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# **Custom Soil Resource Report for Greene County**, **New York**

**Cairo PV Site** 



# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http:// offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2\_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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Greene County, New York	
LcC-Lackawanna and Wellsboro channery loams, 3 to 15 percent	
slopes, very stony	12
MaC—Maplecrest gravelly silt loam, rolling	
MaD—Maplecrest gravelly silt loam, 15 to 25 percent slopes	
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# **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soillandscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

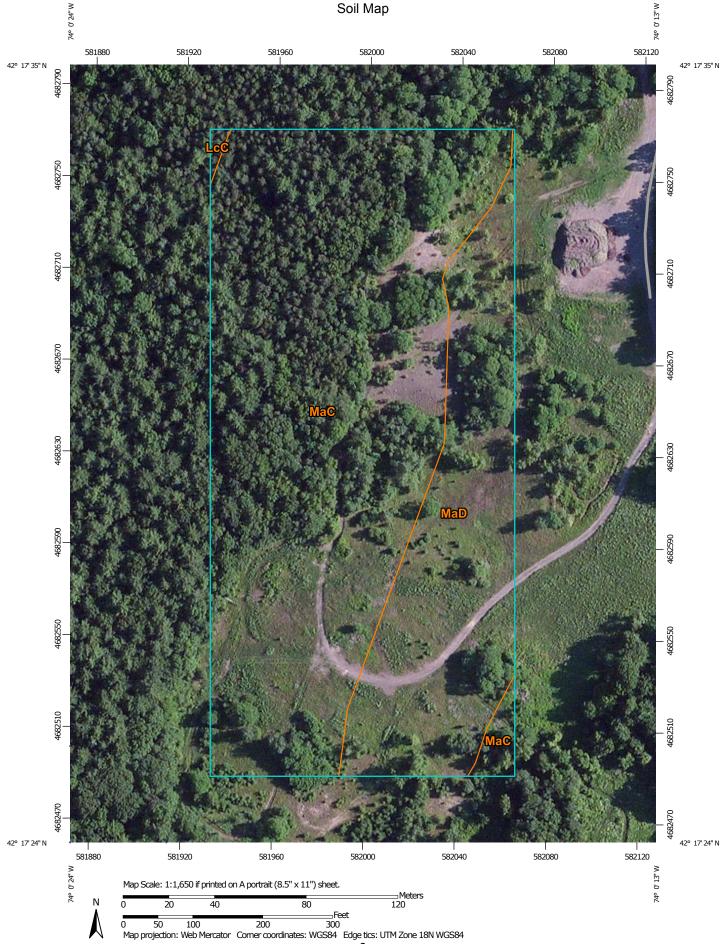
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

## Custom Soil Resource Report Soil Map



MAP LEGEND				MAP INFORMATION	
Area of Ir	nterest (AOI)	333	Spoil Area	The soil surveys that comprise your AOI were mapped at 1:24,000	
	Area of Interest (AOI)	۵	Stony Spot		
Soils	Soil Map Unit Polygons	â	Very Stony Spot	Warning: Soil Map may not be valid at this scale.	
- 4	Soil Map Unit Lines	\$	Wet Spot	Enlargement of maps beyond the scale of mapping can cause	
~	·	$\triangle$	Other	misunderstanding of the detail of mapping and accuracy of soil lin placement. The maps do not show the small areas of contrasting	
	Soil Map Unit Points		Special Line Features	soils that could have been shown at a more detailed scale.	
	I Point Features Blowout	Water Features			
စ္		$\sim$	Streams and Canals	Please rely on the bar scale on each map sheet for map	
$\boxtimes$	Borrow Pit	Transport	ation	measurements.	
×	Clay Spot	• • •	Rails	Source of Map: Natural Resources Conservation Service	
$\diamond$	Closed Depression	~	Interstate Highways	Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov	
X	Gravel Pit	$\sim$	US Routes	Coordinate System: Web Mercator (EPSG:3857)	
0 0 0	Gravelly Spot	$\sim$	Major Roads	Maps from the Web Soil Survey are based on the Web Mercator	
٥	Landfill	~	Local Roads	projection, which preserves direction and shape but distorts	
٨.	Lava Flow	Backgrou	nd	distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurat	
44	Marsh or swamp		Aerial Photography	calculations of distance or area are required.	
R	Mine or Quarry			This product is generated from the USDA-NRCS certified data as	
0	Miscellaneous Water			the version date(s) listed below.	
0	Perennial Water			Soil Survey Area: Greene County, New York	
$\sim$	Rock Outcrop			Survey Area Data: Version 13, Sep 15, 2014	
+	Saline Spot				
°.°	Sandy Spot			Soil map units are labeled (as space allows) for map scales 1:50,00 or larger.	
-	Severely Eroded Spot				
0	Sinkhole			Date(s) aerial images were photographed: Jun 19, 2010—Oct 9 2010	
3	Slide or Slip				
ø	Sodic Spot			The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shiftin of map unit boundaries may be evident.	

Greene County, New York (NY039)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
LcC	Lackawanna and Wellsboro channery loams, 3 to 15 percent slopes, very stony	0.0	0.3%		
МаС	Maplecrest gravelly silt loam, rolling	6.6	71.2%		
MaD	Maplecrest gravelly silt loam, 15 to 25 percent slopes	2.7	28.5%		
Totals for Area of Interest		9.3	100.0%		

# **Map Unit Legend**

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes rarely, if ever, can be mapped without including areas of other taxonomic classes for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# **Greene County, New York**

# LcC—Lackawanna and Wellsboro channery loams, 3 to 15 percent slopes, very stony

### **Map Unit Setting**

National map unit symbol: 9sh3 Elevation: 1,100 to 1,800 feet Mean annual precipitation: 36 to 44 inches Mean annual air temperature: 45 to 50 degrees F Frost-free period: 135 to 170 days Farmland classification: Not prime farmland

### **Map Unit Composition**

Lackawanna and similar soils: 60 percent Wellsboro and similar soils: 20 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Lackawanna**

### Setting

Landform: Till plains, drumlinoid ridges, hills Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till derived from reddish sandstone, siltstone, and shale

## **Typical profile**

H1 - 0 to 3 inches: channery loam
H2 - 3 to 30 inches: channery loam
H3 - 30 to 60 inches: channery silt loam

## **Properties and qualities**

Slope: 3 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 17 to 36 inches to fragipan
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

# Available water storage in profile: Low (about 3.6 inches)

## Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6s Hydrologic Soil Group: C

#### **Description of Wellsboro**

#### Setting

Landform: Drumlinoid ridges, hills, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till derived mainly from reddish sandstone, siltstone, and shale

#### **Typical profile**

H1 - 0 to 8 inches: channery loam H2 - 8 to 20 inches: channery silt loam H3 - 20 to 60 inches: channery silt loam

#### Properties and qualities

Slope: 3 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 15 to 26 inches to fragipan
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 14 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6s Hydrologic Soil Group: D

### **Minor Components**

#### Morris

Percent of map unit: 5 percent

#### Arnot

Percent of map unit: 5 percent

#### Oquaga

Percent of map unit: 5 percent

#### Tunkhannock

Percent of map unit: 5 percent

## MaC—Maplecrest gravelly silt loam, rolling

### Map Unit Setting

National map unit symbol: 9shq Elevation: 1,200 to 1,800 feet Mean annual precipitation: 36 to 44 inches Mean annual air temperature: 45 to 50 degrees F Frost-free period: 135 to 170 days Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Maplecrest and similar soils: 75 percent Minor components: 25 percent Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Maplecrest**

#### Setting

Landform: Valley sides, lateral moraines, end moraines Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till dominated by material from reddish sandstone and siltstone or shale

## **Typical profile**

H1 - 0 to 8 inches: gravelly silt loam
H2 - 8 to 30 inches: gravelly loam
H3 - 30 to 50 inches: gravelly loam
H4 - 50 to 65 inches: very gravelly sandy loam

#### **Properties and qualities**

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: B

## **Minor Components**

#### Oquaga

Percent of map unit: 5 percent

#### Morris

Percent of map unit: 5 percent

#### Lackawanna

Percent of map unit: 5 percent

### Tunkhannock

Percent of map unit: 5 percent

#### Wellsboro

Percent of map unit: 5 percent

# MaD—Maplecrest gravelly silt loam, 15 to 25 percent slopes

## Map Unit Setting

National map unit symbol: 9shr Elevation: 1,200 to 1,800 feet Mean annual precipitation: 36 to 44 inches Mean annual air temperature: 45 to 50 degrees F Frost-free period: 135 to 170 days Farmland classification: Not prime farmland

## Map Unit Composition

Maplecrest and similar soils: 75 percent Minor components: 25 percent Estimates are based on observations, descriptions, and transects of the mapunit.

## **Description of Maplecrest**

## Setting

Landform: Lateral moraines, end moraines, valley sides Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till dominated by material from reddish sandstone and siltstone or shale

## **Typical profile**

- H1 0 to 8 inches: gravelly silt loam
- H2 8 to 30 inches: gravelly loam
- H3 30 to 50 inches: gravelly loam
- H4 50 to 65 inches: very gravelly sandy loam

## **Properties and qualities**

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.4 inches)

## Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: B

## **Minor Components**

#### Wellsboro

Percent of map unit: 5 percent

## Morris

Percent of map unit: 5 percent

## Tunkhannock Percent of map unit: 5 percent

#### Lackawanna Percent of map unit: 5 percent

### Oquaga

Percent of map unit: 5 percent

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# NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM

should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 18. The horizontal datum was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <u>http://www.ngs.noaa.gov</u> or contact the National Geodetic Survey at the following address:

NGS Information Services NOAA, N/NGS12 National Geodetic Survey SSMC-3, #9202 1315 East-West Highway Silver Spring, Maryland 20910-3282 (301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was derived from digital orthophotography provided by the New York State Office of Cyber Security & Critical Infrastructure Coordination. This information was produced as 30centimeter resolution natural color orthoimagery from photography dated April 2004 and 30-centimeter resolution color infrared orthoimagery from photography dated April 2001.

Based on updated topographic information, this map reflects more detailed and up-to-date stream channel configurations and floodplain delineations than those shown on the previous FIRM for this jurisdiction. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map. Also, the road to floodplain relationships for unrevised streams may differ from what is shown on previous maps.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

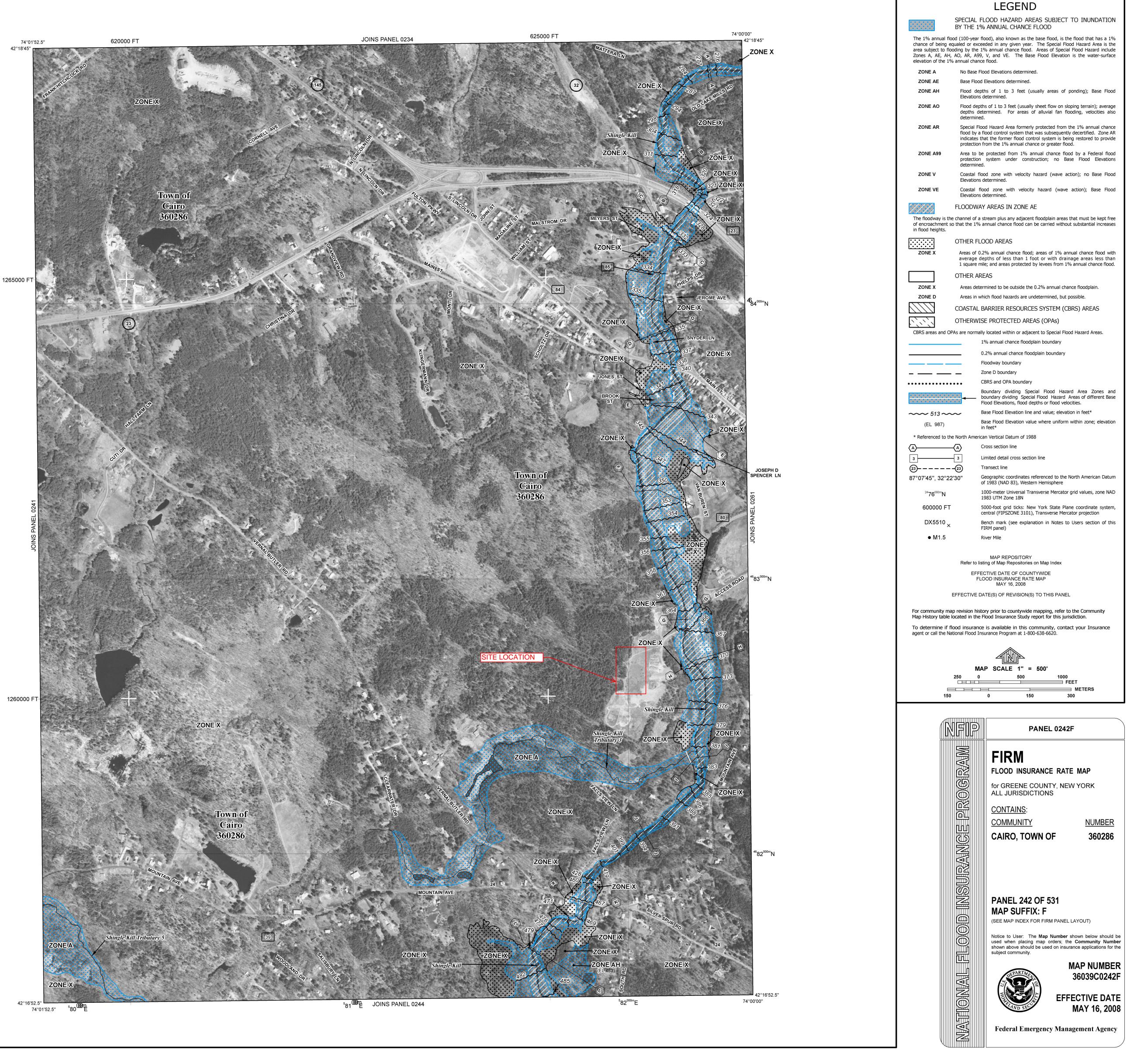
Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the FEMA Map Service Center at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have questions about this map or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



This digital FIRM was produced through a unique cooperative partnership between the New York State Department of Environmental Conservation (NYSDEC) and FEMA. As part of the effort, NYSDEC has joined in a Cooperative Technical Partnership agreement to produce and maintain FEMA's digital FIRM.





# Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO Governor ROSE HARVEY Commissioner

May 11, 2015

Mrs. Nicole Patti LRC Group 85 Civic Center Plaza Suite 103 Poughkeepsie, NY 12601

Re: NYSERDA Solar City Greene County Project 25 Volunteer Drive, Cairo, NY 15PR02268

Dear Mrs. Patti:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Kuth &. Rupont

Ruth L. Pierpont Deputy Commissioner for Historic Preservation

Appendix B

NYSDEC Forms

## NOTICE OF INTENT



## New York State Department of Environmental Conservation

#### **Division of Water**

625 Broadway, 4th Floor



Albany, New York 12233-3505

Stormwater Discharges Associated with <u>Construction Activity</u> Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-15-002 All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

## -IMPORTANT-

## RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

	Owner/Operator Informat	zion							
Owner/Operator (Company Name/Private Owner Name/Municipality Name)									
SolarCity									
Owner/Operator Contact Person La	st Name (NOT CONSULTANT	?)							
S c h e c t e r									
Owner/Operator Contact Person Fi	rst Name								
Elie									
Owner/Operator Mailing Address									
3055Clearview	Way								
City									
San Mateo									
State Zip									
C A     9 4 4 0 2 -									
Phone (Owner/Operator)	Fax (Owner/Operator)								
9 1 4 - 9 2 4 - 6 4 5 0									
Email (Owner/Operator)									
eschecter@sola	r c i t y . c o m		$\Box$						
FED TAX ID 0 2 - 0 7 8 10 4 6 (not room									
0 2 - 0 7 8 10 4 6 (not required for individuals)									

Project Site Informa	tion								
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	ject								
Street Address (NOT P.O. BOX)         8       4       V       0       1       u       n       t       e       r       D       r       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       e       i       i       v       i       i       v       i       v       i       v       i       v       i       v       i       v       i       v       i       v       i       v       i       v       i       v       v       i       v       i       v       i       v       i       v       i       v       v       v       v       v       v       v       v       v       v       v									
Side of Street O North O South O East • West									
City/Town/Village (THAT ISSUES BUILDING PERMIT)									
State         Zip         County           N Y         1 2 4 1 3 -         G r e e n e	DEC Region								
Name of Nearest Cross Street m o u n t a i n A v e									
Distance to Nearest Cross Street (Feet)	Project In Relation to Cross Street O North O South O East • West								
Tax Map Numbers Section-Block-Parcel 101.00-6-5.1	Tax Map Numbers								

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

#### www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

х	Coc	rdi	nate	es (	(Easting)								
	5	8	2	1	4	2							

ΥC	loor	dina	( N	(Northing)						
4	6	8	2	8	2	3				

2. What is the nature of this construction project?
New Construction
$\bigcirc$ Redevelopment with increase in impervious area
$\bigcirc$ Redevelopment with no increase in impervious area

-		pre and post development conditions.
SELECT ONLY ONE CHOI Pre-Developmen Existing Land U	t	Post-Development Future Land Use
⊖ FOREST		○ SINGLE FAMILY HOME Number of Lots
<pre>● PASTURE/OPEN LAND</pre>		○ SINGLE FAMILY SUBDIVISION
○ CULTIVATED LAND		○ TOWN HOME RESIDENTIAL
$\bigcirc$ SINGLE FAMILY HOME		$\bigcirc$ multifamily residential
$\bigcirc$ SINGLE FAMILY SUBD	IVISION	○ INSTITUTIONAL/SCHOOL
$\bigcirc$ TOWN HOME RESIDENT	IAL	$\bigcirc$ INDUSTRIAL
$\bigcirc$ MULTIFAMILY RESIDE	NTIAL	○ COMMERCIAL
$\bigcirc$ INSTITUTIONAL/SCHC	OL	○ MUNICIPAL
$\bigcirc$ INDUSTRIAL		○ ROAD/HIGHWAY
$\bigcirc$ COMMERCIAL		○ RECREATIONAL/SPORTS FIELD
○ ROAD/HIGHWAY		○ BIKE PATH/TRAIL
$\bigcirc$ RECREATIONAL/SPORT	S FIELD	$\bigcirc$ LINEAR UTILITY (water, sewer, gas, etc.)
$\bigcirc$ BIKE PATH/TRAIL		O PARKING LOT
$\bigcirc$ LINEAR UTILITY		○ CLEARING/GRADING ONLY
$\bigcirc$ parking lot		$\bigcirc$ DEMOLITION, NO REDEVELOPMENT
○ OTHER		$\bigcirc$ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
		OTHER       S     0     1     a     r     A     r     r     a     y

\*Note: for gas well drilling, non-high volume hydraulic fractured wells only

4.	In accordance with the enter the total project existing impervious and activities); and the f disturbed area. (Round	ct site area; t rea to be distu Suture impervio	the total area to be ourbed (for redevelopm ous area constructed )	disturbed; ent		
		Al Area To Disturbed 9.7	Existing Imperviou Area To Be Disturbe	s	Iture Imperv Area Withi Disturbed An	n
5.	Do you plan to distur	b more than 5 a	acres of soil at any	one time?	$\bigcirc$ Yes	• No
6.	Indicate the percentage	ge of each Hydi	rologic Soil Group(HS	G) at the s	site.	
	A %	B 1 0 0 %	C %	D %		
7.	Is this a phased proje	ect?			○ Yes	• No
8.	Enter the planned star dates of the disturbar activities.	rt and end	tart Date 1 0 / 0 1 / 2 0 1	<b>End D</b> 5 – 1 2	ate / 0 3 / 2	0 1 5

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			land												Ans	swe	r 9	b)															
			land																														
	-		land													\ns	wer	9	b)														
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1	2.	a M	s th reas ater <b>f no</b>	a s?	ssc	cia	ted	l w:	ith	AA																		0	Yes	3	• N	0	

13.	Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? If Yes, what is the acreage to be disturbed?	⊖ Yes	• No

14.	Will the project disturb soils within a State		
	regulated wetland or the protected 100 foot adjacent	$\bigcirc$ Yes	🖲 No
	area?		

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15.	Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, O Yes O ulverts, etc)?	No 🔿 Un	known								
16.	What is the name of the municipality/entity that owns the separate storm sewer system?										
17.	Does any runoff from the site enter a sewer classified O <b>Yes</b> •	No O Un	known								
18.	Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?	⊖ Yes	INO								
19.	Is this property owned by a state authority, state agency, federal government or local government?	• Yes	○ No								
20.	Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup O <b>Yes O No</b> Agreement, etc.)										
21.	Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS • Yes • No Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?										
22.	Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and O Yes No Quantity Control practices/techniques)? If No, skip questions 23 and 27-39.										
23.	Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?	O Yes	0 No								

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24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:														
O Professional Engineer (P.E.)														
$\bigcirc$ Soil and Water Conservation District (SWCD)														
O Registered Landscape Architect (R.L.A) Continuing Declarational in Fragion and Sodiment Control (CDESC)														
Certified Professional in Erosion and Sediment Control (CPESC)														
O Owner/Operator														
O Other														
SWPPP Preparer														
SolarCity														
Contact Name (Last, Space, First)														
R   e   b   e   c   a   L   .   K   o   z   e														
Mailing Address														
100 N. 18th Street, Suite 1900														
City P h i l a d e l p h i a														
State Zip														
PA 19107-														
Phone Fax														
r       k       o       z       e       @       s       o       i       t       y       .       c       o       m	+													

#### SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

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K	0	Z	e												
5	Sig	gna	atu	re											
		k	P.	J		14	P								Date 0 7 / 2 8 / 2 0 1 5

25.

Other

 $\bigcirc$  Yes  $\bigcirc$  No practices been prepared? 26. Select **all** of the erosion and sediment control practices that will be employed on the project site: Temporary Structural Vegetative Measures O Check Dams ○ Brush Matting ○ Construction Road Stabilization ○ Dune Stabilization Dust Control ○ Grassed Waterway ○ Earth Dike ○ Mulching  $\bigcirc$  Level Spreader  $\bigcirc$  Protecting Vegetation ○ Perimeter Dike/Swale O Recreation Area Improvement ○ Pipe Slope Drain Seeding ○ Portable Sediment Tank ○ Sodding  $\bigcirc$  Rock Dam ○ Straw/Hay Bale Dike ○ Sediment Basin ○ Streambank Protection ○ Sediment Traps ○ Temporary Swale Silt Fence ○ Topsoiling ○ Vegetating Waterways Stabilized Construction Entrance ○ Storm Drain Inlet Protection Permanent Structural ○ Straw/Hay Bale Dike  $\bigcirc$  Debris Basin ○ Temporary Access Waterway Crossing  $\bigcirc$  Diversion ○ Temporary Stormdrain Diversion O Grade Stabilization Structure ○ Temporary Swale ○ Land Grading ○ Turbidity Curtain ○ Lined Waterway (Rock) O Water bars ○ Paved Channel (Concrete)  $\bigcirc$  Paved Flume Biotechnical  $\bigcirc$  Retaining Wall ○ Brush Matting ○ Riprap Slope Protection ○ Wattling O Rock Outlet Protection

Has a construction sequence schedule for the planned management

○ Streambank Protection

																			1	

Post-construction Stormwater Management Practice (SMP) Requirements

<u>Important</u>: Completion of Questions 27-39 is not required if response to Question 22 is No.

- 27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
  - $\bigcirc$  Preservation of Undisturbed Areas
  - $\bigcirc$  Preservation of Buffers
  - Reduction of Clearing and Grading
  - O Locating Development in Less Sensitive Areas
  - Roadway Reduction
  - $\bigcirc$  Sidewalk Reduction
  - Driveway Reduction
  - Cul-de-sac Reduction
  - Building Footprint Reduction
  - Parking Reduction
- 27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
  - All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
  - O Compacted areas were considered as impervious cover when calculating the WQv Required, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.
- 28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total	WQV	Requi	red
			acre-feet

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

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Table 1	-
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#### Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

	Total Contributing		Total C			
RR Techniques (Area Reduction)	Area (acres)	Im	perviou	s P	Area	a(acres)
○ Conservation of Natural Areas (RR-1)		and/or				
O Sheetflow to Riparian Buffers/Filters Strips (RR-2)		and/or				
○ Tree Planting/Tree Pit (RR-3)		and/or	-			
$\bigcirc$ Disconnection of Rooftop Runoff (RR-4).		and/or		•		
RR Techniques (Volume Reduction)						
$\bigcirc$ Vegetated Swale (RR-5) $\cdots$	• • • • • • • • • • • • • • • • • • •	• • • • • • •		-		
$\bigcirc$ Rain Garden (RR-6)	••••••	• • • • • •		-		
$\bigcirc$ Stormwater Planter (RR-7)		•••••				
$\bigcirc$ Rain Barrel/Cistern (RR-8)		• • • • • •				
○ Porous Pavement (RR-9)		• • • • • •				
○ Green Roof (RR-10)	• • • • • • • • • • • • • • • • • • •					
Standard SMPs with RRv Capacity						
$\bigcirc$ Infiltration Trench (I-1)		• • • • • •				
$\bigcirc$ Infiltration Basin (I-2)						
○ Dry Well (I-3)						
○ Underground Infiltration System (I-4)						
○ Bioretention (F-5)						
○ Dry Swale (0-1)				].		
· (·,					,	
Standard SMPs						
$\bigcirc$ Micropool Extended Detention (P-1)						
○ Wet Pond (P-2)						
O Wet Extended Detention (P-3)						
O Multiple Pond System (P-4)				٦.		
O Pocket Pond (P-5)				٦.		
<pre>O Surface Sand Filter (F-1) ······</pre>				٦.		
O Underground Sand Filter (F-2)						
<ul> <li>Onderground Sand Filter (F-2)</li> <li>Perimeter Sand Filter (F-3)</li> </ul>				1		
				4		
O Organic Filter (F-4)				-		
○ Shallow Wetland (W-1)				┥•	$\left  \right $	
O Extended Detention Wetland (W-2)				- •	$\left  \right $	
<pre>O Pond/Wetland System (W-3)</pre>					$\left  - \right $	
$\bigcirc$ Pocket Wetland (W-4)					$\left  - \right $	
$\bigcirc$ Wet Swale (O-2)		• • • • •		-		

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Table 2 -Alternative SMPs(DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)	
	otal Contributing ervious Area(acres)
$\bigcirc$ Hydrodynamic	
$\bigcirc$ Wet Vault	
O Media Filter	
Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.	
Name	
Manufacturer Manufacturer	
Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total	
WQv required and total WQv provided for the project.	/
30. Indicate the Total RRv provided by the RR techniques (Area/Vo. Standard SMPs with RRv capacity identified in question 29.	lume Reduction) and
Total RRv provided	
31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).	○ Yes ○ No
If Yes, go to question 36. If No, go to question 32.	
32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]	
Minimum RRv Required	
32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?	○Yes ○No
<pre>If Yes, go to question 33. Note: Use the space provided in question #39 to summarize a specific site limitations and justification for not reducin 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducin 100% of the WQv required (#28) must also be included in the SWPPP.</pre>	ng ng
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.	

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33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total <u>impervious</u> area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29. WQv Provided acre-feet Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual) Provide the sum of the Total RRv provided (#30) and 34. the WQv provided (#33a). Is the sum of the RRv provided (#30) and the WQv provided 35. (#33a) greater than or equal to the total WQv required (#28)? ○Yes ○No If Yes, go to question 36. If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria. Provide the total Channel Protection Storage Volume (CPv) required and 36. provided or select waiver (36a), if applicable. **CPv** Provided CPv Required acre-feet acre-feet 36a. The need to provide channel protection has been waived because: O Site discharges directly to tidal waters or a fifth order or larger stream.  $\bigcirc$  Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

#### Total Overbank Flood Control Criteria (Qp)

Pre-Development CFS	Post-development
Total Extreme Flood Control	Criteria (Qf)
Pre-Development	Post-development
CFS	. CFS

37a.	The need to meet the Qp and Qf criteria has been waived because:
	$\bigcirc$ Site discharges directly to tidal waters
	or a fifth order or larger stream.
	$\bigcirc$ Downstream analysis reveals that the Qp and Qf
	controls are not required

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been O Yes O No developed?

If Yes, Identify the entity responsible for the long term Operation and Maintenance

#### 39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required(#28). (See question 32a) This space can also be used for other pertinent project information.

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40.	Identify other DEC permits, existing and new, that are required for this project/facility.
	○ Air Pollution Control
	○ Coastal Erosion
	⊖ Hazardous Waste
	$\bigcirc$ Long Island Wells
	$\bigcirc$ Mined Land Reclamation
	○ Solid Waste
	$\bigcirc$ Navigable Waters Protection / Article 15
	○ Water Quality Certificate
	○ Dam Safety
	○ Water Supply
	○ Freshwater Wetlands/Article 24
	$\bigcirc$ Tidal Wetlands
	$\bigcirc$ Wild, Scenic and Recreational Rivers
	○ Stream Bed or Bank Protection / Article 15
	○ Endangered or Threatened Species(Incidental Take Permit)
	$\bigcirc$ Individual SPDES
	$\bigcirc$ SPDES Multi-Sector GP N Y R
	○ Other
	● None

41.	Does this project require a US Army Corps of Engineers Wetland Permit? If Yes, Indicate Size of Impact.	⊖ Yes	• No
42.	Is this project subject to the requirements of a regulated, traditional land use control MS4? (If No, skip question 43)	○ Yes	• No
43.	Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?	⊖ Yes	() No
44.	If this NOI is being submitted for the purpose of continuing or trans coverage under a general permit for stormwater runoff from constructi activities, please indicate the former SPDES number assigned. N Y R	0	

#### Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name	MI
Elie	
Print Last Name	
S c h e c t e r	
Owner/Operator Signature	1
si u	Date 0 7 / 2 8 / 2 0 1 5

New York State Department of Environmental Conservation Division of Water 625 Broadway, 4th Floor Albany, New York 12233-3505 *(NOTE: Submit completed form to address above)* NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity		
Please indicate your permit identification number: NYR		
I. Owner or Operator Information		
1. Owner/Operator Name:		
2. Street Address:		
3. City/State/Zip:		
4. Contact Person:	4a.Telephone:	
4b. Contact Person E-Mail:		
II. Project Site Information		
5. Project/Site Name:		
6. Street Address:		
7. City/Zip:		
8. County:		
III. Reason for Termination		
9a. □ All disturbed areas have achieved final stabilization in accord SWPPP. <b>*Date final stabilization completed</b> (month/year):	ordance with the general permit and	
9b. □ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR (Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)		
9c. □ Other (Explain on Page 2)		
IV. Final Site Information:		
10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices?  □ yes □ no (If no, go to question 10f.)		
10b. Have all post-construction stormwater management practic constructed?		
10c. Identify the entity responsible for long-term operation and n	naintenance of practice(s)?	

# **NOTICE OF TERMINATION** for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? □ yes □ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

□ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

□ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

□ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area?

(acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4?  $\hfill\square$  yes  $\hfill\square$  no

(If Yes, complete section VI - "MS4 Acceptance" statement

#### V. Additional Information/Explanation: (Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:

Date:

## **NOTICE OF TERMINATION** for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:
 I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. 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.
 Printed Name:

Title/Position:

Signature:

Date:

Date:

#### VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. 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.

Printed Name:

Title/Position:

Signature:

#### IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. 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.

Printed Name:

Title/Position:

Signature:

Date:

(NYS DEC Notice of Termination - January 2015)



#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

From

## **CONSTRUCTION ACTIVITY**

Permit No. GP-0-15-002

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

Effective Date: January 29, 2015

Expiration Date: January 28, 2020

John J. Ferguson Chief Permit Administrator

Authorized Signature

1 / 12 / 15

Date

Address: NYS DEC Division of 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 <u>FROM CONSTRUCTION ACTIVITIES</u>

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(Part I)

I.

## 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:

- 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 (5,000) square feet and one (1) acre of land.

**B.** Effluent Limitations Applicable to Discharges from Construction Activities *Discharges* authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.\_

1. Erosion and Sediment Control Requirements - The owner or operator must select, design, install, implement and maintain control measures to minimize the discharge of pollutants and prevent a violation of the water quality standards. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the owner or operator must include in the Stormwater Pollution Prevention Plan ("SWPPP") the reason(s) for the deviation or alternative design and provide information

#### (Part I.B.1)

which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
  - (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
  - (ii) Control stormwater *discharges* to *minimize* channel and streambank erosion and scour in the immediate vicinity of the *discharge* points;
  - (iii) *Minimize* the amount of soil exposed during *construction activity*;
  - (iv) Minimize the disturbance of steep slopes;
  - (v) *Minimize* sediment *discharges* from the site;
  - (vi) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
  - (vii) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
  - (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.
- b. Soil Stabilization. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.
- c. **Dewatering**. *Discharges* from dewatering activities, including *discharges*

#### (Part I.B.1.c)

from dewatering of trenches and excavations, must be managed by appropriate control measures.

- d. **Pollution Prevention Measures.** Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;
  - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a *discharge* of *pollutants*, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
  - (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. Prohibited Discharges. The following discharges are prohibited:
  - (i) Wastewater from washout of concrete;
  - (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
  - (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
  - (iv) Soaps or solvents used in vehicle and equipment washing; and
  - (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion

(Part I.B.1.f)

at or below the outlet does not occur.

#### C. Post-construction Stormwater Management Practice Requirements

- 1. The owner or operator of a construction activity that requires postconstruction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the performance criteria in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the performance criteria in the Design Manual, the owner or operator must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standard.
- 2. The owner or operator of a construction activity that requires postconstruction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

#### a. Sizing Criteria for New Development

- (i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv

(Part I.C.2.a.ii)

that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.

#### b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed

- (i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be calculated in accordance with the criteria in Section 10.3 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or

standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that overbank control is not required.

## c. Sizing Criteria for Redevelopment Activity

(Part I.C.2.c.i)

- (i) Water Quality Volume (WQv): The WQv treatment objective for redevelopment activity shall be addressed by one of the following options. Redevelopment activities located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other redevelopment activities shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
  - (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
  - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
  - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
  - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 - 4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

(Part I.C.2.c.iv)

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

## d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both *New Development* and *Redevelopment Activity* shall provide post-construction stormwater management controls that meet the *sizing criteria* calculated as an aggregate of the *Sizing Criteria* in Part I.C.2.a. or b. of this permit for the *New Development* portion of the project and Part I.C.2.c of this permit for *Redevelopment Activity* portion of the project.

#### D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharges* necessary to meet applicable *water quality standards*. It shall be a violation of 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.

If there is evidence indicating that the stormwater *discharges* authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or

#### (Part I.D)

if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

#### E. 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 F. of this Part.
- 2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges* from *construction activities*.
- 3. Notwithstanding paragraphs E.1 and E.2 above, the following nonstormwater discharges may be authorized by this permit: discharges from firefighting 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 firefighting 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.D of this permit.
- 4. The owner or operator must maintain permit eligibility to discharge under this permit. Any discharges that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the owner or operator must either apply for a separate permit to cover those ineligible discharges or take steps necessary to make the discharge eligible for coverage.
- **F. Activities Which Are Ineligible for Coverage Under This General Permit** All of the following are <u>not</u> authorized by this permit:

(Part I.F)

- 1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
- Discharges that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.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.K. of this permit;
- 4. Construction activities or discharges from construction activities that may adversely affect an endangered or threatened species unless the owner or operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.
- 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:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which disturb one or more acres of land with no existing *impervious cover*, and
  - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.
- 7. Construction activities for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which disturb two or more acres of land with no existing *impervious cover*, and
  - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.

(Part I.F.8)

- 8. Construction activities that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.C.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
  - a. Documentation that the construction activity is not within an archeologically sensitive area indicated on the sensitivity map, and that the construction activity is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
    - 1-5 acres of disturbance 20 feet
    - 5-20 acres of disturbance 50 feet
    - 20+ acres of disturbance 100 feet, or
  - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
    - the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
    - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
    - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
    - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
  - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
    - (i) No Affect
    - (ii) No Adverse Affect

- (iii) Executed Memorandum of Agreement, or
- d. Documentation that:
  - (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.
- Discharges from construction activities that are subject to an existing SPDES individual or general permit where a SPDES permit for construction activity has been terminated or denied; or where the owner or operator has failed to renew an expired individual permit.

## Part II. OBTAINING PERMIT COVERAGE

#### A.Notice of Intent (NOI) Submittal

1. An owner or operator of a construction activity that is <u>not</u> subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the Department in order to be authorized to discharge under this permit. An owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (<u>http://www.dec.ny.gov/</u>). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address.

#### NOTICE OF INTENT NYS DEC, Bureau of Water Permits 625 Broadway, 4<sup>th</sup> 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 prepare a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department. The owner or operator shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department. An owner or operator shall use either the electronic (eNOI) or paper version of the NOI.

The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the address in Part II.A.1.

#### (Part II.A.2)

The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department 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*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*.

- 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.** Permit Authorization

- 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. See the Department's website (<u>http://www.dec.ny.gov/</u>) for more information,
  - 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 Permit Administrator at the Regional Office listed 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. a complete 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

#### (Part II.B.3)

will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

- 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 electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or
  - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
  - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.
- 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 both a complete electronic version of the NOI (eNOI) and signed "*MS4* SWPPP Acceptance" form, or
  - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.
- 4. The Department may suspend or deny an owner's or operator's coverage

## (Part II.B.4)

under this permit if the Department determines that the SWPPP does not meet the permit requirements. In accordance with statute, regulation, and the terms and conditions of this permit, the Department may deny coverage under this permit and require submittal of an application for an individual SPDES permit based on a review of the NOI or other information pursuant to Part II.

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. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.B. of this permit.

## C. General Requirements For Owners or Operators With Permit Coverage

- 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. of this permit.
- 2. The owner or operator shall maintain a copy of the General Permit (GP-0-15-002), NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, inspection reports, and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. 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 *regulated*, *traditional land use control MS4*, the *regulated*, *traditional land use control MS4* (provided the *regulated*, *traditional land use control 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

#### (Part II.C.3.a)

have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit 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 temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.
- 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. In accordance with statute, regulations, and the terms and conditions of this permit, 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. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
- 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 regulated, traditional land use control 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 regulated, traditional land use control MS4, the owner or operator shall have the SWPPP amendments or modifications reviewed and accepted by the regulated, traditional land use control MS4 prior to commencing construction of the post-construction stormwater management practice

(Part II.D)

# D. Permit Coverage for Discharges Authorized Under GP-0-10-001

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-10-001), an *owner or operator* of *a construction activity* with coverage under GP-0-10-001, as of the effective date of GP-0-15-002, shall be authorized to *discharge* in accordance with GP-0-15-002, unless otherwise notified by the Department.

An owner or operator may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-15-002.

## E. Change of *Owner or Operator*

2. 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. of this permit. If the original owner or operator maintains ownership of a portion of 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)

# Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

# A. General SWPPP Requirements

- 1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. 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*. A copy of the completed, final NOI shall be included in the SWPPP.
- 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

#### (Part III.A.5)

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 or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.C.4. of 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. 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 under penalty of law 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 am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

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

#### (Part III.A.6)

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.

#### **B. Required SWPPP Contents**

- Erosion and sediment control component All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the 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;
  - 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); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; 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 this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, 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;
- A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, 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 technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005;
- 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
- Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. 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 standard.

2. Post-construction stormwater management practice component – The owner or operator of any construction project 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 applicable sizing criteria in Part I.C.2.a., c. or d. of this permit and the performance criteria in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

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. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates

that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;

- (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
- (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. 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 applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, 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.f. above.

## 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 of this permit. *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 of this permit.

(Part IV)

## IV. 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 (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
- 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.** Contractor Maintenance Inspection Requirements

- 1. The owner or operator of each construction activity identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.
- 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 *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
- 3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* 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.

## C. Qualified Inspector Inspection Requirements

#### (Part IV.C)

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. and IV.B. of this permit **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 (5,000) 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.
  - 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 DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control 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 DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control 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 of this permit.
- e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, 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.

- 3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures 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 and pollution prevention measures that need repair or maintenance;
  - g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
  - Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

#### (Part IV.C.4.i)

- 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 pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and
- I. 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 this permit 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. of this permit, the inspection reports shall be maintained on site with the SWPPP.

## V. 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 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

(Part V.A.2)

- 2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
  - a. Total project completion All *construction activity* identified in the SWPPP has been completed; <u>and</u> all areas of disturbance have achieved *final stabilization*; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> 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 postconstruction 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. of this permit.
  - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
- 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 the requirements in Part V.A.2.a. or b. of this permit have been achieved.
- 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 have the regulated, traditional land use control MS4 sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The regulated, traditional land use control 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 regulated, traditional land use control 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.A.3. of this permit.

(Part V.A.5)

- 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:
  - a. the post-construction stormwater management practice(s) and any rightof-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 a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,
  - d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; 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 Department receives a complete NOT submitted in accordance with Part V. of this general permit.

#### 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 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

#### (Part VII)

## 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. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the owner or operator.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

#### **B.** Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

#### C. Enforcement

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. Need to Halt or Reduce Activity Not a Defense

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.

(Part VII.E)

## E. Duty to Mitigate

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. Duty to Provide Information

The owner or operator shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions 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 these documents. Copying of documents will be done at the requester's expense.

## G. Other Information

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 of the documents required by this permit, 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 using the contact information in Part II.A. of this permit. 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. Signatory Requirements

- 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 laws environmental compliance with 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
  - 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. of this permit 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. of this permit;
  - 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. Property Rights

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. Severability

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.

#### K. Requirement to Obtain Coverage Under an Alternative Permit

1. 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

## (Part VII.K.1)

*discharge* under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, 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. 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. Proper Operation and Maintenance

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. Inspection and Entry

The owner or operator shall allow an authorized representative of the Department, EPA, applicable county health department, 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:

- 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), practices or operations regulated or required by this permit.
- 4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

(Part VII.N)

## **N. Permit Actions**

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. 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. Any Department initiated 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

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

# R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

# VIII. APPENDIX A

# Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the postdevelopment 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.

**Equivalent (Equivalence)** – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**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 and Section 70-0117 of the ECL authorizing a category of discharges.

**Groundwater(s)** - 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.

**Historic Property** – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State

or National Registers of Historic Places.

**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.

**Infeasible** – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

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) environmental assessment form or other documents, 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.

**Minimize** – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**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).

**New Development** – means any land disturbance that does meet the definition of Redevelopment Activity included in this appendix.

**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.

**Performance Criteria** – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

**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 6 NYCRR Parts 700 et seq.

**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 supervision of the licensed Professional working under the direct supervision of the licensed Professional 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. 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..

**Redevelopment Activity(ies)** – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

**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.

**Site limitations** – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

**Sizing Criteria** – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

**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.

Steep Slope – means land area with a Soil Slope Phase that is identified as an E or F, or

the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.

**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 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.

**Temporarily Ceased** – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

**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* is 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 <u>not</u> located in one of the watersheds listed in Appendix C or <u>not</u> <i>directly discharging</i> 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 <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 Construction of a barn or other agricultural building, silo, stock yard or pen.	
The follow land:	ving construction activities that involve soil disturbances of one (1) or more acres of	
	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 <i>alter hydrology from pre</i> <i>to post development</i> conditions Athletic fields (natural grass) that do not include the construction or reconstruction of <i>impervious area</i> <u>and</u> do not <i>alter hydrology from pre to post development</i> 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 <i>impervious cover</i> 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 (5,000) square feet and one (1) acre of land.	

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# Table 2

# CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

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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 <i>directly</i> <i>discharging</i> 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 <i>directly discharging</i> 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 <i>alter the hydrology from pre to post development</i> 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 <i>impervious</i> <i>area</i> , 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 <i>impervious cover</i> , and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project	
•	All other construction activities that include the construction or reconstruction of <i>impervious</i> area or 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
- Kinderhook Lake Watershed Figure 5

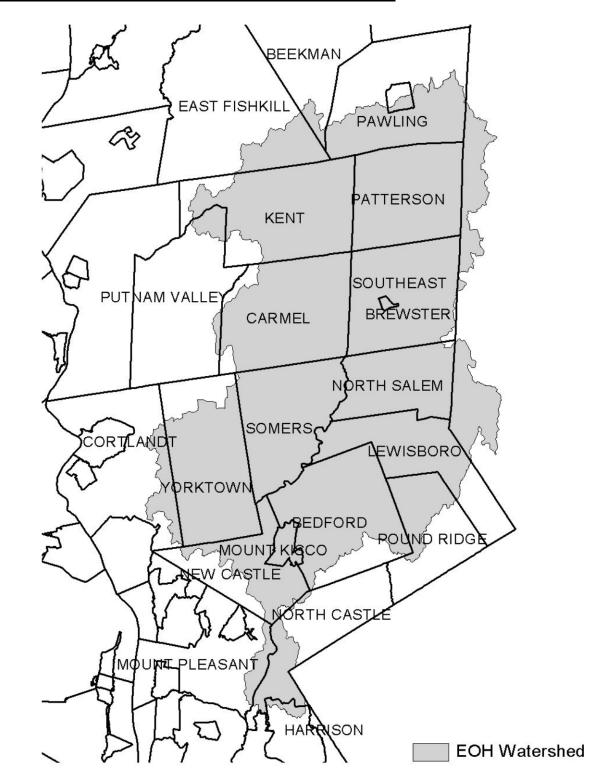


Figure 1 - New York City Watershed East of the Hudson

## Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

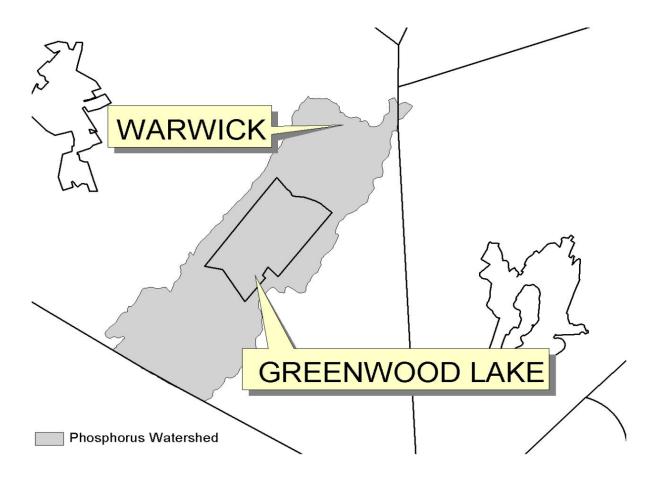
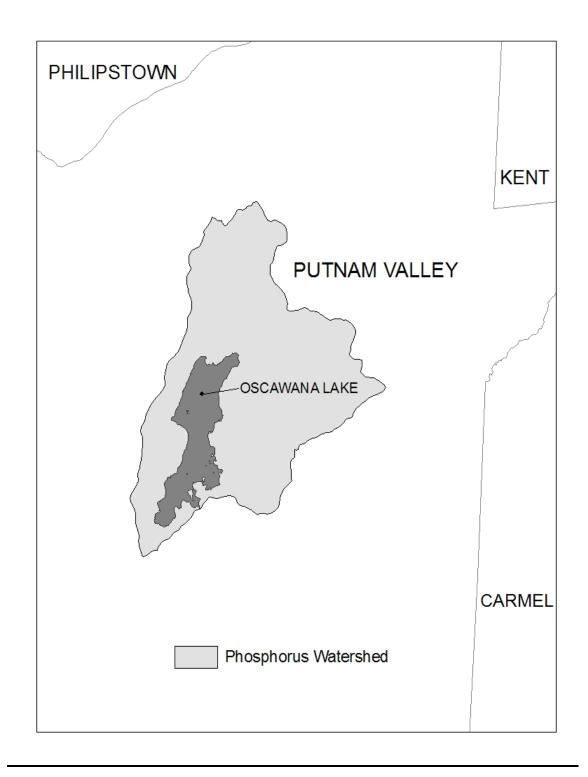


Figure 4 - Oscawana Lake Watershed



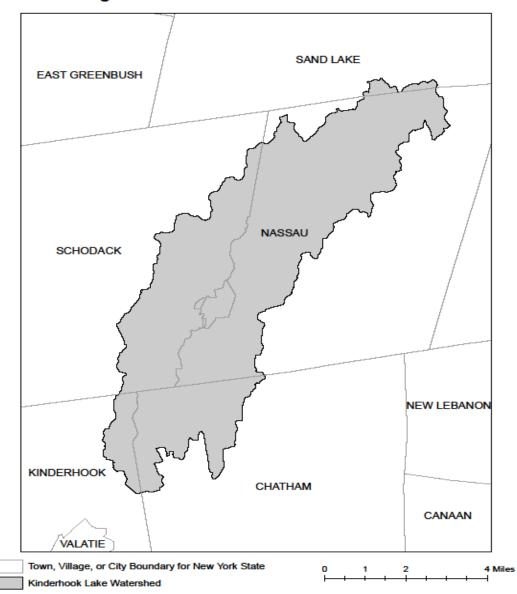


Figure 5: Kinderhook Lake Watershed

## XI. 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

## I. 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 subdivisions with 25% or less total impervious cover at total site build-out 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 New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY WATERBODY		COUNTY WATERBODY	
Albany	Ann Lee (Shakers) Pond, Stump Pond	Greene	Sleepy Hollow Lake
Albany	Basic Creek Reservoir	Herkimer	Steele Creek tribs
Allegheny	Amity Lake, Saunders Pond	Kings	Hendrix Creek
Bronx	Van Cortlandt Lake	Lewis	Mill Creek/South Branch and tribs
Broome	Whitney Point Lake/Reservoir	Livingston	Conesus Lake
Broome	Fly Pond, Deer Lake	Livingston	Jaycox Creek and tribs
Broome	Minor Tribs to Lower Susquehanna	Livingston	Mill Creek and minor tribs
	(north)	Livingston	Bradner Creek and tribs
Cattaraugus	Allegheny River/Reservoir	Livingston	Christie Creek and tribs
Cattaraugus	Case Lake	Monroe	Lake Ontario Shoreline, Western
Cattaraugus	Linlyco/Club Pond	Monroe	Mill Creek/Blue Pond Outlet and tribs
Cayuga	Duck Lake	Monroe	Rochester Embayment - East
Chautauqua	Chautauqua Lake, North	Monroe	Rochester Embayment - West
Chautauqua	Chautauqua Lake, South	Monroe	Unnamed Trib to Honeoye Creek
Chautauqua	Bear Lake	Monroe	Genesee River, Lower, Main Stem
Chautauqua	Chadakoin River and tribs	Monroe	Genesee River, Middle, Main Stem
Chautauqua	Lower Cassadaga Lake	Monroe	Black Creek, Lower, and minor tribs
Chautauqua	Middle Cassadaga Lake	Monroe	Buck Pond
Chautauqua	Findley Lake	Monroe	Long Pond
Clinton	Great Chazy River, Lower, Main Stem	Monroe	Cranberry Pond
Columbia	Kinderhook Lake	Monroe	Mill Creek and tribs
Columbia	Robinson Pond	Monroe	Shipbuilders Creek and tribs
Dutchess	Hillside Lake	Monroe	Minor tribs to Irondequoit Bay
Dutchess	Wappinger Lakes	Monroe	Thomas Creek/White Brook and tribs
Dutchess	Fall Kill and tribs	Nassau	Glen Cove Creek, Lower, and tribs
Erie	Green Lake	Nassau	LI Tribs (fresh) to East Bay
Erie	Scajaquada Creek, Lower, and tribs	Nassau	East Meadow Brook, Upper, and tribs
Erie	Scajaquada Creek, Middle, and tribs	Nassau	Hempstead Bay
Erie	Scajaquada Creek, Upper, and tribs	Nassau	Hempstead Lake
Erie	Rush Creek and tribs	Nassau	Grant Park Pond
Erie	Ellicott Creek, Lower, and tribs	Nassau	Beaver Lake
Erie	Beeman Creek and tribs	Nassau	Camaans Pond
Erie	Murder Creek, Lower, and tribs	Nassau	Halls Pond
Erie	South Branch Smoke Cr, Lower, and	Nassau	LI Tidal Tribs to Hempstead Bay
<b>_</b> .	tribs	Nassau	Massapequa Creek and tribs
Erie	Little Sister Creek, Lower, and tribs	Nassau	Reynolds Channel, east
Essex	Lake George (primary county: Warren)	Nassau	Reynolds Channel, west
Genesee	Black Creek, Upper, and minor tribs	Nassau	Silver Lake, Lofts Pond
Genesee	Tonawanda Creek, Middle, Main Stem	Nassau	Woodmere Channel
Genesee	Oak Orchard Creek, Upper, and tribs	Niagara	Hyde Park Lake
Genesee	Bowen Brook and tribs	Niagara	Lake Ontario Shoreline, Western
Genesee	Bigelow Creek and tribs	Niagara	Bergholtz Creek and tribs
Genesee	Black Creek, Middle, and minor tribs	Oneida	Ballou, Nail Creeks
Genesee	LeRoy Reservoir	Onondaga	Ley Creek and tribs
Greene	Schoharie Reservoir	Onondaga	Onondaga Creek, Lower and tribs

# **APPENDIX E**

# List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

OnondagaOnondaga Creek, Middle and tribsSuffolkGreat South Bay, WestOnondagaOnondaga Creek, Upp, and minor tribsSuffolkMill and Seven PondsOnondagaHarbor Brook, Lower, and tribsSuffolkMoriches Bay, EastOnondagaNinemile Creek, Lower, and tribsSuffolkMoriches Bay, WestOnondagaOnondaga Creek, Lower, and tribsSuffolkMoriches Bay, WestOnondagaOnondaga Creek, Lower, and tribsSuffolkQuantuck BayOnondagaOnondaga Creek, Lower, and tribsSuffolkShinnecock Bay (and Inlet)OntarioHoneoye LakeSullivanBodine, Montgomery LakesOntarioGreat Brook and minor tribsSullivanDavies LakeOrangeOrange Brook and tribsSullivanSwan LakeOrangeOrange LakeTompkinsCayuga Lake, Southern EndOrleansLake NeatahwantaUlsterAshokan ReservoirOswegoPleasant LakeUlsterEsopus Creek, Lower, Main StenPutnamPalmer LakeUlsterEsopus Creek, Middle, and minorQueensJamaica Bay, Eastern, and tribs (Queens)tribstribsQueensShellbank BasinWarrenLake GeorgeRichmondGrasmere, Arbutus and Wolfes LakesWarrenHuddle/Finkle Brooks and tribsRocklandCongers Lake, Swartout LakeWarrenHadgue Brook and tribsRocklandCongers Lake, Swartout LakeWarrenHadgue Brook and tribs	
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Saratoga Tribs to Lake Lonely tribs	
Saratoga Lake Lonely Wayne Port Bay	
Schenectady Collins Lake Wayne Marbletown Creek and tribs	
Schenectady Duane Lake Westchester Lake Katonah	
Schenectady Mariaville Lake Westchester Lake Mohegan	
Schoharie Engleville Pond Westchester Lake Shenorock	
Schoharie Summit Lake Westchester Reservoir No.1 (Lake Isle)	
Schuyler Cayuta Lake Westchester Saw Mill River, Middle, and tribs	
St. Lawrence Fish Creek and minor tribs Westchester Silver Lake	
St. Lawrence Black Lake Outlet/Black Lake Westchester Teatown Lake	
Steuben Lake Salubria Westchester Truesdale Lake	
Steuben Smith Pond Westchester Wallace Pond	
Suffolk Millers Pond Westchester Peach Lake	
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Suffolk Canaan Lake Westchester Sheldrake River and tribs	
Suffolk Lake Ronkonkoma Westchester Blind Brook, Lower	
Suffolk Beaverdam Creek and tribs Westchester Blind Brook, Upper, and tribs	
Suffolk Big/Little Fresh Ponds Westchester Lake LincoIndale	
Suffolk Fresh Pond Westchester Lake Meahaugh	
Suffolk Great South Bay, East Wyoming Java Lake	
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Note: The list above identifies those waters from the final New York State "2014 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated January 2015, that are impaired by silt, sediment or nutrients.

# APPENDIX F

# LIST OF NYS DEC REGIONAL OFFICES

<u>Region</u>	<u>Covering the</u> <u>Following</u> <u>Counties:</u>	DIVISION OF ENVIRONMENTAL PERMITS (DEP) <u>Permit Administrators</u>	DIVISION OF WATER (DOW) <u>Water (SPDES)</u> 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, Ро Вох 296 Ray Brook, Ny 12977-0296 Tel. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 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

**Construction Phase Forms** 

# STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES CONSTRUCTION SITE LOG BOOK

# Table of Contents

- I. Pre-Construction Meeting Documents
  - a. Preamble to Site Assessment and Inspections
  - b. Operator's Certification
  - c. Qualified Professional's Credentials & Certification
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- II. Construction Duration Inspections
  - a. Directions
  - b. Modification to the SWPPP
- III. Monthly Summary Reports
- IV. Monitoring, Reporting, and Three-Month Status Reports
  - a. Operator's Compliance Response Form

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETIN	<b>NG DOCUMENTS</b>
Project Name	
Permit No	Date of Authorization
Name of Operator	
Prime Contractor	

#### a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional<sup>1</sup> conduct an assessment of the site prior to the commencement of construction<sup>2</sup> and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization<sup>3</sup> using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

#### **b.** Operators 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. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Name (please print):				
Title		Date:		
Address:				
Phone:	Email:			
Signature:				

#### c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (please pri	nt):	
Title		Date:
Address:		
Phone:	Email:	
Signature:		

#### d. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

# Yes No NA

- [] [] Has a Notice of Intent been filed with the NYS Department of Conservation?
- [] [] [] Is the SWPPP on-site? Where?
- [] [] Is the Plan current? What is the latest revision date?\_\_\_\_\_
- [] [] Is a copy of the NOI (with brief description) onsite? Where?\_\_\_\_
- [] [] Have all contractors involved with stormwater related activities signed a contractor's certification?

## 2. Resource Protection

# Yes No NA

- [] [] Are construction limits clearly flagged or fenced?
- [] [] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
- [] [] [] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

# 3. Surface Water Protection

### Yes No NA

- [] [] Clean stormwater runoff has been diverted from areas to be disturbed.
- [] [] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
- [] [] Appropriate practices to protect on-site or downstream surface water are installed.
- [] [] [] Are clearing and grading operations divided into areas <5 acres?

# 4. Stabilized Construction Entrance

Yes No NA

- [] [] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
- [] [] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
- [] [] Sediment tracked onto public streets is removed or cleaned on a regular basis.

### 5. Perimeter Sediment Controls

# Yes No NA

- [] [] Silt fence material and installation comply with the standard drawing and specifications.
- [] [] Silt fences are installed at appropriate spacing intervals
- [] [] Sediment/detention basin was installed as first land disturbing activity.
- [] [] [] Sediment traps and barriers are installed.

# 6. Pollution Prevention for Waste and Hazardous Materials

### Yes No NA

- [] [] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- [] [] The plan is contained in the SWPPP on page \_
- [] [] Appropriate materials to control spills are onsite. Where?

#### **II. CONSTRUCTION DURATION INSPECTIONS**

#### a. Directions:

**Inspection Forms will be filled out during the entire construction phase of the project.** Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

(4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

#### SITE PLAN/SKETCH

**Inspector** (print name)

**Date of Inspection** 

Qualified Professional (print name)Qualified Professional SignatureThe above signed acknowledges that, to the best of his/her knowledge, all information provided on the<br/>forms is accurate and complete.

#### CONSTRUCTION DURATION INSPECTIONS

#### **Maintaining Water Quality**

#### Yes No NA

- [] [] Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
- [] [] Is there residue from oil and floating substances, visible oil film, or globules or grease?
- [] [] All disturbance is within the limits of the approved plans.
- [] [] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

#### Housekeeping

1. General Site Conditions

### Yes No NA

- [] [] [] Is construction site litter and debris appropriately managed?
- [] [] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- [] [] [] Is construction impacting the adjacent property?
- [] [] [] Is dust adequately controlled?

### 2. Temporary Stream Crossing

#### Yes No NA

- [] [] Maximum diameter pipes necessary to span creek without dredging are installed.
- [] [] [] Installed non-woven geotextile fabric beneath approaches.
- [] [] [] Is fill composed of aggregate (no earth or soil)?
- [] [] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

### **Runoff Control Practices**

1. Excavation Dewatering

### Yes No NA

- [] [] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- [] [] Clean water from upstream pool is being pumped to the downstream pool.
- [] [] Sediment laden water from work area is being discharged to a silt-trapping device.
- [] [] Constructed upstream berm with one-foot minimum freeboard.

#### 2. Level Spreader

### Yes No NA

- [] [] Installed per plan.
- [] [] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- [] [] Flow sheets out of level spreader without erosion on downstream edge.

#### 3. Interceptor Dikes and Swales

### Yes No NA

- [] [] Installed per plan with minimum side slopes 2H:1V or flatter.
- [] [] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- [] [] Sediment-laden runoff directed to sediment trapping structure

#### CONSTRUCTION DURATION INSPECTIONS Runoff Control Practices (continued)

4. Stone Check Dam

#### Yes No NA

- [] [] [] Is channel stable? (flow is not eroding soil underneath or around the structure).
- [] [] [] Check is in good condition (rocks in place and no permanent pools behind the structure).
- [] [] [] Has accumulated sediment been removed?.

# 5. Rock Outlet Protection

# Yes No NA

[] [] [] Installed per plan.

[] [] Installed concurrently with pipe installation.

# Soil Stabilization

1. Topsoil and Spoil Stockpiles

# Yes No NA

- [] [] [] Stockpiles are stabilized with vegetation and/or mulch.
- [] [] Sediment control is installed at the toe of the slope.

# 2. Revegetation

# Yes No NA

- [] [] [] Temporary seedings and mulch have been applied to idle areas.
- [] [] 4 inches minimum of topsoil has been applied under permanent seedings

# **Sediment Control Practices**

### 1. Stabilized Construction Entrance

# Yes No NA

- [] [] [] Stone is clean enough to effectively remove mud from vehicles.
- [] [] [] Installed per standards and specifications?
- [] [] Does all traffic use the stabilized entrance to enter and leave site?
- [] [] [] Is adequate drainage provided to prevent ponding at entrance?

### 2. Silt Fence

# Yes No NA

- [] [] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
- [] [] Joints constructed by wrapping the two ends together for continuous support.
- [] [] Fabric buried 6 inches minimum.
- [] [] Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is \_\_\_% of design capacity.

#### CONSTRUCTION DURATION INSPECTIONS

#### **Sediment Control Practices (continued)**

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices) **Yes No NA** 

- [] [] Installed concrete blocks lengthwise so open ends face outward, not upward.
- [] [] Placed wire screen between No. 3 crushed stone and concrete blocks.
- [] [] Drainage area is 1acre or less.
- [] [] [] Excavated area is 900 cubic feet.
- [] [] [] Excavated side slopes should be 2:1.
- [] [] [] 2" x 4" frame is constructed and structurally sound.
- [] [] Posts 3-foot maximum spacing between posts.
- [] [] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- [] [] Posts are stable, fabric is tight and without rips or frayed areas.
- Sediment accumulation \_\_\_\_% of design capacity.

4. Temporary Sediment Trap

#### Yes No NA

- [] [] Outlet structure is constructed per the approved plan or drawing.
- [] [] Geotextile fabric has been placed beneath rock fill.

Sediment accumulation is \_\_\_% of design capacity.

5. Temporary Sediment Basin

#### Yes No NA

- [] [] Basin and outlet structure constructed per the approved plan.
- [] [] Basin side slopes are stabilized with seed/mulch.
- [] [] Drainage structure flushed and basin surface restored upon removal of sediment basin facility. Sediment accumulation is \_\_\_% of design capacity.
- <u>Note</u>: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

#### CONSTRUCTION DURATION INSPECTIONS

#### **b.** Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or

2. The SWPPP proves to be ineffective in:

- a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
- b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and

3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

#### **Modification & Reason:**

# **III. Monthly Summary of Site Inspection Activities**

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern
•	•	•	
-			
-			

#### **Owner/Operator 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 false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Signature of Permittee or Duly Authorized Representative

Name of Permittee or Duly Authorized Representative Date

Duly authorized representatives <u>must have written authorization</u>, submitted to DEC, to sign any permit documents.

# **CONTRACTOR CERTIFICATION**

"I certify, under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions 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 persons to cause r contribute to a violation of water quality standards."

Contractor Signature	Title	Date
Contractor Signature	Title	Date
Contractor Signature	Title	Date
Contractor Signature	Title	Date