Stormwater Pollution Prevention Plan

Roaring Brook Wind Power Project

Town of Martinsburg, New York

Project No. 07-093d

Prepared for:



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PREPARER CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

This Stormwater Pollution Prevention Plan was prepared in accordance with the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-08-001), pursuant to Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law. This SPDES General Permit implements the Federal Clean Water Act pertaining to stormwater discharges.

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1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) was prepared for the Roaring Brook Wind Farm Project to control runoff and pollutants from the site during and after construction. The plan was developed to comply with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit No GP-0-08-001.

2.0 **PROJECT DESCRIPTION**

The purpose of the project is to provide a source of renewable energy to the New York State Power Grid. The project is located west of Carey Road in the Town of Martinsburg, Lewis County as shown in Figures 1 & 2.

The Roaring Brook Wind Farm will have 39 turbines located along ridge tops. The electricity generated from the wind will be emissions free, resulting in no air or water discharges. Each turbine will have a generating capacity of 2.0 megawatts (MW) with a total generating nameplate capacity of 78 MW. The generation of the power will include the turbine sites, a system of gravel access roads, 34.5 kV electrical interconnects (underground), an operation and maintenance facility, and a permanent meteorological tower. The transmission of the power will involve installation of a 34.5 kV electrical interconnect (underground & above ground) and a substation. An overall layout of the project components is shown in Figure 3. The project will also require existing state, county, and town road intersection improvements to accommodate truck turning movements.

The project will be developed on leased private lands, totaling approximately 4100 acres and has an estimated construction cost of approximately \$ 200 million. It is currently scheduled to start construction in Fall 2009 with an anticipated completion by Fall of 2010. Preliminary Construction Plans for the project are provided in Appendices B,C, and D of this report.

3.0 SITE CHARACTERISTICS

3.1 Watershed Descriptions

The watershed boundary for the generation portion of the project is 4581 acres with runoff draining to three discharge points as shown in Figure 4. It is located in the Tug Hill Plateau. The terrain can be characterized as relatively flat with elevations ranging from 1900 ft to 2020 ft. The watershed is undeveloped and the ground cover includes both forested and open space areas. The land use has been primarily for logging and hunting. There is a network of existing improved logging roads consist of a 10' wide uncurbed gravel surface with a normal crown. Runoff from the roadways and adjacent land areas are conveyed to poorly defined ditches and through cross culverts that lead to wetlands and streams.

The watershed boundary for the Operation & Maintenance Building is 66 acres with runoff draining to one discharge point as shown in Figure 5. The terrain is relatively flat with

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elevations ranging from 1820 ft to 1940 ft. The watershed is undeveloped except for a few dwellings along Flat Rock Road. The ground cover can be described as an open fields.

Since the electrical interconnect is linear and will not have any impervious cover, there will be no concentrated flow to identifiable discharge points. The watershed boundary for the Substation is 783 acres with runoff draining to one discharge point as shown in Figure 6. The terrain is rolling with elevations ranging from 1140 ft to 1830 ft. The watershed is undeveloped except for a few dwellings along road network. The ground cover includes both forested and open space areas.

The project is not located within a Total Maximum Daily Load (TMDL) Watershed.

3.2 Surface Waters

The receiving streams for point discharges from the project have been summarized in Table 1:

Discharge Point	Stream Name	Project Component	Stream Order		
1	Roaring Brook	Generation Site	Second		
2	N. Branch Fish Creek	Generation Site	Second		
3	Edick Creek	Generation Site	First		
4	Tributary of Roaring Brook	O & M Building	First		
5	Tributary of Roaring Brook	Substation	Third		

Table 1: Receiving Streams

These water bodies are not identified on the Section 303(d) list of impaired waters. They are classified as Class C protected trout streams.

The Federal Emergency Management Agency (FEMA) published a Flood Insurance Rate Map (FIRM) for the Town of Martinsburg, Lewis County, NY in June 1985. The map indicates the project lies within flood Zone C, which are areas determined to be outside the 100-year flood plain.

3.3 Rainfall Data

Rainfall data for the project watershed was interpolated from maps in the National Weather Service (NWS) Technical Paper 40 (TP-40). The 24 hour rainfall data specific to Lewis County for various storm events is shown in Table 2:

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Return Period (year)	Rainfall (in)
1	2.5
10	3.6
25	4.2
100	4.8

Table 2: 24 Hour Rainfall Data

3.4 **Sensitive Resource Areas**

A Supplemental Draft Environmental Impact Statement (SDEIS) has been prepared for the project by Environmental Design & Research (EDR) to assess impacts to sensitive resource areas. The following is a summary of the findings from this report:

Wetlands

Wetlands were initially examined through review of available mapping and aerial photography. Field reconnaissance and wetland boundary survey were then performed in areas where there would be a potential impact by the wind farm components. It was determined that there are both federal and state jurisdictional freshwater wetlands within the project. The proposed access roads and wind turbine sites were designed to minimize impacts where possible. The temporary wetland impact will be 2.88 acres and the permanent impact will be 0.38 acres. Permits regarding wetlands are being submitted to the Army Corp of Engineers (ACOE) and NYSDEC.

Endangered or Threatened Species

The NYSDEC Natural Heritage Program (NHP) has indicated that there are no endangered or threatened plant species within the project area. However, five significant ecological communities have been documented within or adjacent to the project. These include shallow emergent marsh, shrub swamp, marsh headwater stream, rocky headwater stream, and beechmaple mesic forest.

Based on research of existing data sources there are 260 wildlife species that could be found at some time in the project area. The NHP has indicated that the Indiana Bat is a federal & state listed endangered species. The Breeding Bird Survey (BBS) has indicated the northern harrier and upland sandpiper are state listed threatened species. Of the listed species, only the northern harrier was observed on the project site during field surveys conducted in 2007.

Temporary and permanent vegetation clearing will result in some loss or alteration in habitat. Construction related impacts will cause incidental wildlife injury and mortality. The wind farm operation is expected to result in some level of avian and bat collision mortality. At the request

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of the NYSDEC, a post construction monitoring program will be implemented to gain a better understanding of this issue.

Historic Places

John Milner Associates, Inc. (JMA) conducted a Phase 1A Cultural Resources Investigation of the project area. The study indicated that no prehistoric sites are within the project area but it was hunting grounds for the Oneida Iroquois. There are no previously recorded archeological sites within the project area. Historic maps indicate that a 1870's sawmill and a 1906 unidentified structure (likely a logging or hunting camp) are within the project. A Phase 1B Investigation will be needed to determine with certainty whether any archeological sites are present.

3.5 Soils

The NRCS Web Soil Survey for Lewis County indicates that only the north portion of the project area has been surveyed. A map of the soil types is shown in Figure 8 along with a soils report of the physical properties. A soil scientist with the NRSC indicated that the project will likely have similar soils to those that are mapped. It is estimated that approximately 60% of the watershed is Hydrologic Soil Group C and 40% is Hydrologic Soil Group D. The following table is a summary of the soil data available for the site:

Soil Symbol	Description	Hydrologic Soil Group	Drainage Class
EdB	Empeyville loam, 3-8% slopes, stony	С	moderately well drained
PbA	Medisaprists, Peat and Muck, deep	A/D	poorly drained
TaB	Tughill silt loam, 0-5% slopes, very stony	D	very poorly drained
WdA	Westbury loam, 0-3% slopes, stony	С	somewhat poorly drained
WdB	Westbury loam, 3-8% slopes, stony	С	somewhat poorly drained
WmB	Worth loam, 3-8% slopes, stony	С	well drained
WmC	Worth loam, 8-15% slopes, stony	С	well drained

Table 3: NRCS Soil Data

A preliminary subsurface investigation of the project was conducted by Atlantic Testing Laboratories on 11 test borings to determine soil conditions for design of the turbine foundations. This report found that ground water was at a depth of 4 ft or greater.

4.0 POST DEVELOPMENT CONDITIONS

4.1 Wind Farm Components

The SWPPP has been developed to ensure water quality is maintained during the construction and operation of all the project's components. A list of the project's components, as well as a brief description of each, is as follows:

Turbine Sites

A level area around each turbine base will be graded to allow for the turbine foundation and crane pad. The rotor assembly area will have a central area that will be graded level. The remainder will be graded to tie into the existing ground. The disturbance footprint will vary depending on the cut and fill situation. The crane pad and rotor assembly area will be left in place after construction to provide for future service operations. A grading layout for each turbine site is included on the Construction Plans.

Turbine Access Driveways

Associated with each turbine site will be a 38' wide gravel driveway for the crane access and future maintenance purposes. The access drives have an accumulative total length of 5 miles.

Service Roads

The proposed service roads leading to the turbine access driveways will be 12 miles in length and utilize a series of existing improved logging roads. The service roads will generally be a 38' wide gravel surface with a normal crown to facilitate crane access. The horizontal and vertical alignment have been designed to closely match existing conditions where possible. In areas near wetlands many of the roads have been reduced to a 16' width to minimize impacts. These narrower segments of road will limit the routes the cranes can follow to access the turbine sites. In some instances, where wetland impacts are encountered, the 38' width will be reclaimed to 16' after construction is complete. A typical section and plan/profile layout for the service roads are shown on the Construction Plans.

Intersection Improvements

A Route Evaluation Study completed by CME in August 2008 has determined a primary truck route for delivery of the turbine components along public roads shown in Figure 9. Due to the length of the blades, the trucks require a 150' radius for turning movements. For preliminary planning, it is anticipated that the following intersections will require widening with gravel:

- Rector Rd/Swernicki Rd
- Rector Rd/Borkowski Rd
- Route 177/ Eagle Factory Rd
- Flat Rock Rd/Swernicki Rd

Electrical Interconnect

The electricity from the turbines will be raised to a 34.5 kV voltage and collected with buried power cables. The electrical interconnect will be installed within the footprint along the 12 miles

Preliminary SWPPP - Page 5

of service roads. Off the generation site, the buried power cables will continue eastward for approximately 5 miles and then become overhead lines for another 3 miles before reaching the substation. The alignment of the offsite electrical interconnect is shown in Figure 3.

In areas not on a roadway, a 22' disturbance corridor is assumed for installation to allow access for equipment, and then will be immediately vegetated and returned to existing grade.

SubStation

The collection station will be located on a private parcel off Lee Road adjacent to the existing National Grid Taylorville-Boonville Transmission Line. It is the end of the collection system and will transform the voltage of the system from 34.5 kV to 115 kV. The collection station will be an area enclosed by a chain link fence approximately 200'x 250' with a 20' wide gravel access road. A point of interconnect station (POI) will be located adjacent to the collection station. It will be an area enclosed with a chain link fence approximately 250' x 250'. The POI station will be owned and operated by National Grid.

Operations and Maintenance Building

The operations and maintenance facility (O&M) allows an operator to control the critical functions of each turbine. The O&M building will also have a storage yard adjacent to the building and an individual wasterwater disposal system. The building is estimated to be approximately 4000 sf. The location will be on a private parcel with access to a maintained portion of Flat Rock Road near the generating site.

Meteorolgical Towers

One meteorological tower is proposed in the northwest corner of the generating site to collect wind measurements. The tower will be a tubular or lattice steel structure. It will require a small level graded area (100'x150') and a 12' gravel access drive.

Temporary Staging Area

A temporary staging area for the construction of the project will be provided near the intersection of Joes Pond Road and Alaska Highway. The staging area will be used for temporary storage of equipment, materials, large project components, and vehicle parking. The staging area is approximately 10 acres and will be vegetated at the end of the project.

Spoil Areas

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The potential spoil areas for the project have been identified on the construction drawings. These areas will be used for wasting excess cut material and temporary stockpiling of material during earthwork operations. The spoil areas are approximately 27.1 acres and will be restored to original contours at the end of the project.

4.2 Wind Farm Impacts

The following table is a summary of the impacts associated with the construction of the wind farm:

Project Component	Limit of Tree Clearing (Acres)	Area of Disturbance (Acres)	Impervious Cover (Acres)
Turbine Sites	64.0	44.9	11.8
Turbine Access Driveways	39.1	45.3	28.8
Service Roads	16.3	62.3	41.8
Intersections		0.75	0.75
Interconnect (UG & OH)	8.3	22.2	
Substation	0.1	4.7	2.6
O & M Building		5.0	1.6
Meteorological Tower	2.1	0.9	0.6
Temporary Storage/Staging Area	10.0	10.0	
Spoil Areas	16.1	27.1	
Total	156	223.2	88.0

Table 4: Wind Farm Impacts

The table indicates that the project construction will result in a total of 223.2 acres of disturbance due to grading. Of this impact area, 19.2 acres is existing impervious cover that will be replaced. The future impervious cover within the impact area is 88.0 acres. It is estimated that approximately 87.2 acres of the 156 acres that were tree cut will be converted from forestland to successional communities.

5.0 STORMWATER MANAGEMENT ASSESSMENT

5.1 **Permit Requirements**

A stormwater management assessment of this project has been conducted to address NYSDEC General Permit No GP-0-08-001 since the land disturbance will exceed 1 acre.

5.2 Objectives

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The proposed project is being designed to fulfill the following stormwater management objectives:

- To construct an adequate stormwater drainage system and roadway section cross slope to convey runoff and prevent flooding problems.
- To provide for the water quality treatment and quantity control of stormwater effluent

from impervious surfaces when appropriate.

• To provide temporary and permanent erosion control measures.

5.3 **Proposed Stormwater Drainage**

Along the service roads, proposed ditches and cross culverts will be provided in cut areas. This is to prevent upland runoff from ponding or sheeting across the road and causing erosion. The ditches will be grass lined and have the following geometric parameters:

- Longitudinal Slope = varies
- Fore Slopes = 1:3, Back Slope = 1:3
- Bottom Width = 2 feet
- Depth = 1.5 feet

There are 16 existing cross culverts associated with stream crossings that will need to be replaced shown in Figure 10. A field assessment indicated that the culverts are deteriorated and do not provide the adequate cover needed for the construction loads. The proposed cross culverts were designed to convey the 25 yr storm event with a minimum head water depth to pipe diameter ratio of 1.5. In addition, the pipe slopes were designed to keep outlet velocities below 12 ft/s. The flow rates were calculated using the Rational Method. The culverts were designed based on the Hydraulic Design of Highway Culverts (HDS No. 5) by the Federal Highway Administration. A table summarizing the results is shown in Appendix F.

The culverts located along protected streams have been designed to be buried approximately 20% to provide an earth bottom to promote wetland connectivity. Flared end sections will be included at the inlet and outlet of single barrel culverts to improve flow efficiency. At multiple barrel locations the pipes will be mitered to conform to the slope. Stone aprons of an appropriate size have been incorporated at the outlet of each culvert to prevent scour and promote energy dissipation. While rolled erosion control product would allow for vegetation growth at the outlet, the stone apron provides better protection for downstream habitats.

The proposed ditches and culvert improvements throughout the project are intended to maintain existing flow paths where possible.

5.4 Peak Flow Attenuation and Water Quality Treatment

In accordance with the General Permit requirements, the project has been evaluated with regard to water quality and water quantity control. The project will not result in the construction of wide scale impervious surfaces. The total area of gravel surfaces is less than 2 % of the project watersheds. Since the gravel surfaces represent such a small amount of the watersheds, post-construction stormwater quality is not expected to be impaired and peak flow rates will not

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increase. Therefore, stormwater management practices for water quality and quantity control are not proposed.

Throughout the corridor, the intent was to try and maintain open channel and sheet flow wherever possible because of its inherent benefits. There are some areas of the project with mild grades that will detain the flow long enough for the vegetation to provide some level of water quality treatment.

6.0 EROSION AND SEDIMENT CONTROL

6.1 Erosion and Sediment Control Practices

The temporary erosion control practices provided during construction activities are designed to minimize soil loss and prevent water pollution of streams and adjacent properties. The temporary measures employed for construction of the project include:

- Silt Fence/Strawbale Dike
- Stabilized Construction Entrance
- Temporary Access Waterway Crossing
- Tree/Vegetation Protection Barrier
- Temporary Stream Diversion
- Sediment Trap
- Culvert Inlet Protection
- Check Dams
- Dust Control

Permanent ground cover is essential for providing continued protect against soil loss and water pollution after construction. The permanent erosion and sediment control practices include:

- Seeding and Mulching
- Erosion Control Matting
- Riprap Outlet Protection

All of the features/elements associated with temporary and permanent erosion and sediment control for this project are in accordance with the "New York Standards and Specifications for Erosion and Sediment Control".

6.2 Construction Sequence

The construction schedule for the generation site requires offsite improvements to the local roads and the construction of site roads, interconnect, and tower foundations during the first construction season. During the second construction season, the wind towers would be erected, the towers would be connected to the electrical interconnect, and the wind farm tested and commissioned.

First season construction will involve making improvements to the local road system to accommodate the turning movements of the construction vehicles, and also the transport vehicles for the turbine components. These improvements can be started as soon as highway permits are obtained from the agency having jurisdiction over the roadway.

The site improvements will need to proceed in an organized manner due to the large number of vehicles that will need to use the site roads. Initial information and assumptions assume that geotextile fabrics and geotextile grids will be necessary to provide support to the weak subgrade soils. Without the geotextiles, the thickness of the gravel layer would need to be increased to provide sufficient support for the component transport vehicles, and the erection crane. Present information provides for the interconnect cables to be direct buried within the roadway footprint to minimize impacts to the wetlands. The cables will therefore have to be installed prior to the placement of the geotextiles. Equipment used to provide direct burial of the cables generally have a limited depth they place the cable at and therefore, the roads will need to be rough graded to accommodate the cable placement (rough graded at least within the footprint of the roadway where the cables will be placed). Tower foundation construction is also expected during the first season and will require access roads to be fully constructed so that materials required for the foundations (concrete, steel rebar, etc.,) can be trucked in (highway-use vehicles would be needed to truck these materials in).

Based on the above assumptions, the anticipated sequencing of construction events will be

- 1. Clearing of access roads and tower sites
- 2. Rough grading and erosion control measures
- 3. Provide stream diversions at culverts and remove existing culverts.
- 4. Install electrical conduits at culvert locations, install new culverts and backfill
- 5. Remove stream diversion structures
- 6. Install cables by direct burial
- 7. Fine grade roadway embankment
- 8. Place geotextiles
- 9. Construct gravel road
- 10. Fine grade slopes and stabilize slopes
- 11. Rough grade tower sites, place erosion control measures, and excavate foundation
- 12. Form concrete tower foundation, install tower rebar and bolt cages, and place concrete.
- 13. Backfill around tower foundation, construct crane pad and component laydown area

To develop the site, considerable construction materials will have to be trucked in and removed from the site. It is anticipated that most of the material removed during rough grading will be

Roaring Brook Wind PowerProject, Lewis County, NY Preliminary SWPPP - Page 10 unsuitable material and will need to be spoiled. Tower areas where clearing and leveling are needed (outside of the tower foundation area, crane pad, and tower component storage area) would be suitable for the disposal of this material. Also, reclaimed road areas could used to spoil native topsoil. Once rough grading has been completed, the contractor will begin installation of the interconnect cables (all site roads are expected to be rough graded so that the cable installer can complete his work without multiple mobilizations). It is anticipated that there will be conduits under the cross culverts. To accomplish this, the contractor will need to provide stream diversions and pump the water from one side of the road to the other. Stream diversion structures will be erected at both ends of the culvert locations, water pumped around the site, the existing culverts removed, the area regraded and the conduits installed, new culverts installed and backfilled, and the stream diversion structures removed.

Once the conduits and the new culverts are installed, the contractor can direct bury the cables and begin the construction of the gravel roads. Fine grading of the embankment will commence, followed by placement of the geotextile and then spreading of the gravel. Trucks bringing the gravel in will back-dump the gravel which will then be spread over the geotextile by track loaders/tractors (at least one foot of gravel should be placed on the geotextile before vehicles operate over it). The 16 foot roadways will need several areas widened to allow for safe passage of trucks hauling in the gravel, and also there will need to be turn-around areas to allow for the trucks to turn and backup to the areas where the gravel is being spread. Once the gravel roadways are constructed, the side slopes can be fine graded, seeded and mulched.

The roadways will be sequenced in a manner that will facilitate the construction of the individual tower sites. As soon as a roadway segment is completed, the construction of the individual tower site(s) along that segment will begin. Work will progress with the rough/fine grading of the tower site access roadway, site leveling for the tower foundation construction, excavation for the foundation, construction of the tower access road, setting the re-bar and bolt cages, placing concrete, regarding site around the tower foundation, and construction of the crane pads and component storage areas.

The first priority should be the construction of Alaska Road to facilitate the movement of materials. Additionally, work could simultaneously be started on French Road and also Main Access Road/Joe's Pond Road. As these roads are completed, work on Birch Road should be initiated to provide a circuitous route from French Road to Birch Road to Alaska Highway. Lastly, Fox Road, Fairbanks Highway, and Denali Highway should be constructed.

Construction of the site access roads in the following sequence would permit construction work at the following tower sites as soon as the segment is completed:

- 1. Alaska Highway (Carey Road to Joes Pond Road) WTG-10
- 2. Joes Pond Road/Main Access Road WTC-1, 2, 3, 4, 5, 6, 7, 8
- 3. Alaska Highway (Joes Pond Road to Birch Road) WTG-9,16
- 4. French Road (Carey Road to Birch Road) WTC-20,21,22,23,24
- 5. Birch Road WTC-17,18,19
- 6. Denali Highway, Fairbanks Highway and Fox Road WTC-11,12,13,14,15,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39

Expected disturbance at each tower site is anticipated to be approximately 2.9 acres. Current DEC regulations restrict disturbances to 5 acres. Work activities (road construction, tower site construction, spoil areas, stockpiling areas, etc.) will have to be closely coordinated so that the maximum DEC disturbance area is not exceeded, or a variance will need to be requested.

6.3 Inspections

Iberdrola Renewables and/or its site contractor shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in the SWPPP and required by the SPDES permit have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction. Following the commencement of construction, 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. Since there are a limited number of professionals registered as CPESC, the qualified professional will have practical and applied construction experience and possess familiarity with BMPs and erosion and sediment control techniques.

7.0 CONSTRUCTION HOUSEKEEPING PRACTICES

During construction, the following procedures and practices will be followed:

- Cleared brush, debris, and soils will be stockpiled up slope from erosion and sediment controls.
- Equipment cleaning, maintenance, and repair of will be conducted in designated areas protected by berms.
- The contractor will insure that the project site is litter free at the close of each working day. The contractor will dispose of construction debris as decided upon with the owner and in accordance with all applicable regulations.
- Portable sanitary facilities will be made available to construction personnel and will be serviced regularly.
- The contractor will provide the owner with a description of controls to manage waste, reduce pollutants (including storage practices), spill prevention, and response to spills. Any construction chemicals will be disposed of in accordance with regulations and will not be disposed of into the stormwater system.

8.0 CONCLUSION

The proposed project consists of the construction of a wind-powered generating facility and the transmission of the power. The purpose is to invest in alternative energy sources for the future.

Since the project components will exceed a 1 acre disturbance, a Preliminary Stormwater Pollution Prevention Plan (SWPPP) was prepared in accordance with applicable state regulations. The services roads and turbine sites were designed to maintain existing drainage patterns for upland watershed areas. Since the proposed gravel surfaces associated with the wind farm are less than 2% of the project watershed areas, there will be a minimal effect on water quality or peak flow rates. An Erosion and Sediment Control Plan has been developed to control runoff and pollutants from the site during and after construction.

The Preliminary Notice of Intent (NOI) for the project has been completed and is included in Appendix H of the report.

APPENDIX A FIGURES



Figure 1: Regional Project Location



EDR

January 2008

Notes: Base Map: ESRI StreetMap USA, Year 2006.



Roaring Brook Wind Power Project Town of Martinsburg - Lewis County, New York

Figure 2: Site Location

Generating Site

- Electrical Interconnect Site
- Town Boundary

Notes: Base Map: ESRI StreetMap USA, Year 2006.









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Roaring Brook Wind Power Project



Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter. The content of organic matter in a soil can be maintained by returning crop residue to the soil.

Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://soils.usda.gov)

Report—Physical Soil Properties

					Physical	Soil Properties-	Lewis County,	New York, Middle	Part					
Map symbol	Depth	Sand	Silt	Clay	Moist	Saturated	Available	Linear	Organic	Eros	sion fa	ctors	Wind	Wind
and soil name					bulk density	hydraulic conductivity	water capacity	extensibility	matter	Kw	Kf	т	group	erodibility index
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
EdB— Empeyville loam, 3 to 8 percent slopes, stony														
Empeyville	0-2	_	—	1-18	1.10-1.40	4.00-14.00	0.08-0.12	0.0-2.9	4.0-10.0	.20	.28	2	3	86
	2-21	—	_	1-18	1.20-1.50	4.00-14.00	0.08-0.15	0.0-2.9	0.0-1.0	.24	.37			
	21-25	—	_	1-18	1.70-2.00	0.42-1.40	0.00-0.00	0.0-2.9	0.0-1.0	.17	.37			
	25-40	—	_	1-18	1.65-1.95	0.42-1.40	0.00-0.00	0.0-2.9	0.0-1.0	.17	.37			
PbA—Peat and Muck, deep														
Medisaprists	0-66	—	_	_	0.13-0.23	1.40-42.00	0.35-0.45	—	70.0-99.0				2	134
Medihemists	0-6	—	_	—	0.30-0.40	42.00-141.00	0.55-0.65	—	55.0-75.0				7	38
	6-60	_	_	_	0.10-0.25	4.00-42.00	0.45-0.55	—	55.0-75.0					
TaB—Tughill silt loam, 0 to 5 percent slopes, very stony														
Tughill	0-3	_	_	5-18	1.10-1.40	4.00-14.00	0.08-0.13	0.0-2.9	4.0-8.0	.20	.32	3	8	0
	3-28	_	_	5-18	1.20-1.50	1.40-4.00	0.06-0.08	0.0-2.9	1.0-3.0	.17	.55			
	28-60	—	_	5-18	1.70-1.95	0.42-1.40	0.05-0.07	0.0-2.9	0.0-1.0	.17	.64			
W—Water														
Water	_	_	_	-	_	_	-	-	_					

	Physical Soil Properties– Lewis County, New York, Middle Part													
Map symbol	Depth	Sand	Silt	Clay	Moist	Saturated	Available	Linear	Organic	Eros	ion fa	octors	Wind	Wind
and soil name					bulk density	hydraulic conductivity	water capacity	extensibility	matter	Kw	Kf	т	erodibility group	erodibility index
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
WdB—Westbury loam, 3 to 8 percent slopes, stony														
Westbury	0-2	—	—	3-12	0.90-1.20	4.00-14.00	0.12-0.18	0.0-2.9	2.0-8.0	.20	.28	2	5	56
	2-10	—	_	3-12	1.40-1.70	4.00-14.00	0.07-0.15	0.0-2.9	1.0-3.0	.24				
	10-20	_	_	3-12	1.70-2.00	0.42-1.40	0.02-0.06	0.0-2.9	0.0-1.0	.24	.64			
	20-60	—	—	3-12	1.70-2.00	0.42-1.40	0.02-0.16	0.0-2.9	0.0-1.0	.24	.64			
WmB—Worth loam, 3 to 8 percent slopes, stony														
Worth	0-2	_	_	3-18	1.10-1.40	4.00-14.00	0.10-0.13	0.0-2.9	3.0-8.0	.20	.28	3	3	86
	2-25	_	_	3-18	1.20-1.50	4.00-14.00	0.08-0.14	0.0-2.9	0.0-2.0	.24	.43			
	25-55	_	_	3-18	1.70-2.00	0.42-1.40	0.02-0.06	0.0-2.9	0.0-1.0	.24	.55			
	55-60	_	_	3-18	1.65-1.95	0.42-1.40	0.03-0.08	0.0-2.9	0.0-1.0	.24	.55			
WmC—Worth loam, 8 to 15 percent slopes, stony														
Worth	0-2	_	_	3-18	1.10-1.40	4.00-14.00	0.10-0.13	0.0-2.9	3.0-8.0	.20	.28	3	3	86
	2-25	_	_	3-18	1.20-1.50	4.00-14.00	0.08-0.14	0.0-2.9	0.0-2.0	.24	.43			
	25-55	_	_	3-18	1.70-2.00	0.42-1.40	0.02-0.06	0.0-2.9	0.0-1.0	.24	.55			
	55-60	_	_	3-18	1.65-1.95	0.42-1.40	0.03-0.08	0.0-2.9	0.0-1.0	.24	.55			







APPENDIX B PRELIMINARY CONSTRUCTION PLANS GENERATION SITE

ROARING BROOK WIND FARM

TOWN OF MARTINSBURG, LEWIS COUNTY NEW YORK

OCTOBER 2008



FILE = Fi/Projects/2007/07-093d/cadd/dgn/cover.dc DATE = 10/17/2008 USER = bdillenbeck

INDEX OF DRAWINGS										
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FILE = F:NProjects/2 DATE = 10/17/2008 USER = bdillenbeck



TYPICAL 16 FOOT RECLAIMED SECTION SEE OVERALL PLAN (SHEETS PI-1 TO PI-4 FOR LIMITS) (NOT TO SCALE)



GENERAL NOTES FOR SOIL EROSION PREVENTION AND SEDIMENT CONTROL

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ANY APPLICABLE DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATER QUALITY CERTIFICATION AND/OR FRESHWATER WETLANDS PERMIT.
- ALL STREAM CHANNEL WORK SHALL BE LIMITED TO WITHIN THE DESIGNATED WORK LIMITS.
- ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF THE STREAMS BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE, OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES.
- 4. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF NEW YORK STATE, NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLANDS OR WATERS.
- 5. ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THIS PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO AN APPROPRIATE UPLAND AREA FOR DISPOSAL.
- 6. ALL DREDGED AND EXCAVATED MATERIAL SHALL BE DISPOSED OF ON AN UPLAND SITE AND BE SUITABLY STABILIZED SO THAT IT CANNOT REASONABLY RE-ENTER ANY WATER BODY OR WETLAND AREA.
- 7. IF CONSTRUCTION ACTIVITIES ARE DISCONTINUED IN AREAS OF SOLL DISTURBANCE BEFORE FINAL GRADING IS COMPLETE, TEMPORARY GRADING SHALL BE SEEDED WITH AN APPROPRIATE PERRENIAL GRASS SEED MIX AND SHALL BE MULCHED WITH HAY OR STRAW WITHIN 21 DAYS OF THE TIME IT WAS TEMPORARILY DISCONTINUED, MULCH SHALL BE MAINTAINED UNTIL A SUITABLE VEGETATIVE COVER IS ESTABLISHED.
- 8. WHEN FINAL GRADING IS COMPLETE THE CONTRACTOR SHALL COMPLETE THE WORK OF TURF ESTABLISHMENT WITHIN ONE WEEK OR OTHERWISE STABILIZE THE AREA IF THE SEASON IS NOT APPROPRIATE FOR TURF ESTABLISHMENT, IN THE EVENT TURF ESTABLISHMENT CAN NOT BE COMPLETED THE CONTRACTOR SHALL STABLIZE THE AREA WITHIN ONE WEEK OF COMPLETING THE FINAL GRADING, WITH HAY OR STRAW MULCH, OR OTHER APPROVED OR SPECIFIED MEANS UNTIL TURF ESTABLISHMENT CAN BE DONE.
- 9. PERIODIC CLEANING OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES MAY BE NECESSARY.
- 10. ALL SOIL AND EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING EARTHWORK OPERATIONS AND SHALL REMAIN IN PLACE UNTIL SLOPES ARE STABILIZED WITH SEEDING AND/OR OTHER SLOPE PROTECTION.

- 11. IN THE EVENT DEWATERING OPERATIONS BECOME NECESSARY, A DEWATERING DISCHARGE BASIN WILL BE REQUIRED UNLESS THE THE PUMP DISCHARGE IS AS CLEAR AND FREE OF SEDIMENT AS THE FLOWING STREAM. LOCATION AND DESIGN TO BE APROVED, A.D.B.E.
- 12. HAYBALES HAVE A LIMITED LIFE EXPECTANCY AND SHALL BE REPLACED EVERY TWO MONTHS
- 13. RING ANY TEMPORARY STOCKPILES OF ERODIBLE MATERIAL WITH STRAW BALES/SILT FENCE AS SHOWN TO CONTAIN ANY EROSION OF THE PILE. PILES SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SLOPE TREATMENT TABLE, SHEET ECD-8.
- 14. OTHER EROSION CONTROL MEASURES MAY BE REQUIRED , IN ADDITION TO SCHEMES SHOWN ON THESE SHEETS.
- 15. ALL ERODED SOIL SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERCOURSES.
- 16, PORTABLE SANITARY FACILITIES WILL BE MADE AVAILABLE TO CONSTRUCTION PERSONNEL AND WILL BE SERVICED REGULARLY.

SPDES/SWPP GENERAL NOTES

- 1. IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPDES, EACH CONTRACTOR AND SUBCONTRACTOR MUST CERTIFY THAT.
- 2. A DETAILED SWPPP HAS BEEN DEVELOPED BY THE PROJECT DESIGNERS AS PART OF THE SPDES GEMERAL PERMIT FOR CONSTRUCTION ACTIVITY, GP-OBD-ODI, PROCESS, THE SWPPP CONTAINS AN EROSION PREVENTION AND SEDIMENT CONTROL PLAN, CONSTRUCTION PHASING PLAN, AND A MAINTENANCE SCHEDULE AMONG OTHER ITEMS, THE CONTRACTOR AND ANY SUBCONTRACTORS (IF APPLICABLE) SHALL BECOME FAMILIAR WITH THE CONTENTS AND PRIOR TO BEGINNING ANY EARTHWORK, SHALL CLARIFY THAT THEY UNDERSTAND THE PERMIT CONDITIONS AND THEIR RESPONSIBILITES.
- 3. PRIOR TO BEGINNING EARTHWORK ACTIVITY. THE CONTRACTOR SHALL SUBMIT:
- A CONSTRUCTION SCHEDULE THAT ADDRESSES IMPLEMENTATION OF THE DETAILED EROSION PREVENTION AND SEDIMENT CONTROL PLAN SHOWN IN THE CONTRACT PLANS AND/OR SWPPP, IF THE CONTRACTOR PROPOSES A REVISED CONSTRUCTION SEQUENCE, THE CONTRACTOR SHALL SUBMIT A MODIFIED EROSION AND SEDIMENT CONTROL PLAN FOR EIC APPROVAL.
- THE NAME AND QUALIFICATIONS OF THE DESIGNATED EROSION PREVENTION AND SEDIMENT CONTROL SUPERVISOR ON THE JOB. TO BE CONSIDERED QUALIFIED, THE SUPERVISOR MUST HAVE ATTENDED AN EROSION AND SEDIMENT CONTROL TRAINING COURSE AND PROVIDE PROOF OF ATTENDANCE TO THE EIC.
- THE CONTRACTOR WILL PROVIDE THE OWNER WITH A DESCRIPTION OF CONTROLS TO MANAGE WASTE, REDUCE POLLUTANTS (INCLUDING STORAGE PRACTICES), SPILL PREVENTION, AND RESPONSE TO SPILLS. ANY CONSTRUCTION CHEMICALS WILL BE DISPOSED OF IN ACCODANCE WITH REGULATIONS AND WILL NOT BE DISPOSED OF INTO STORWWATER SYSTEMS.

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å å Contact Jenny Burke	Business Developer	Phone: (315) 376-4316			2 Shudd Same S To Same & D. Nach Baudinn S. Anna ananana a manana an an an anan a anna an		75 C C C C C C C C C C C C C C C C C C C	/ 33/ S State St., Suite 201 - LOWVINE, INT 1330/
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-EXISTING WATER COURSE PROVIDE EROSION CONTROL MATTING IN DITCHES WITH SLOPES > 4.0% CULVERT INLET)w TEMPORARY ACCESS WATERWAY CROSSING ---TEMPORARY SEED AND MULCH CHECK DAM (TYP.) -TURBINE PEDESTAL π E.F SANDBAG DAM-CRANE PAD-ACCESS ROAD (GRAVEL) 3:-... B 15-0 ACCESS ROAD -SILT FENCE OR STRAW BALE DIKE STONE LINED ROTAR LAYDOWN R 150'-0" RIPRAP OUTLET ROCK FILTER SILT FENCE OR STRAW BALE DIKE-SPOIL FROM CULVERT 圞 10' (MIN.) -LIMIT OF TREE CLEARING ¥ ¥ NYS DEC WETLAND ¥ TEMPORARY SEED AND MULCH TYPICAL TEMPORARY STREAM DIVERSION PLAN ¥ ¥ ¥ NOTES: 1. ANY PUMPED WATER FROM EXCAVTED AREAS MUST BE FILTERED PRIOR TO DISCHARGE USING A SEDIMENT TRAP. TYPICAL TURBINE SITE EROSION CONTROL PLAN (NOT TO SCALE) 2. ALL DISTURBED AREAS WITHIN THE EXISTING CHANNEL SHOULD BE STABILIZED BEFORE FLOW IS REDIRECTED INTO IT. 3. DISTURBED STREAM BANKS SHOULD BE STABILIZED USING AN EROSION CONTROL MATTING.







- **APPLICATION NOTES:**
- NOTES:
- 2. A 33' WASH AREA SHALL BE PROVIDED. ADDITIONAL GRADING MAY BE REQUIRED TO PROVIDE WASHING AREAS.
- 3.



A. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.

1. MODIFICATIONS MAY BE REQUIRED TO MATCH FIELD CONDITIONS.

. PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS. ALTERNATIVE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCES MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER. 4. THE CONTRACTOR SHALL GRADE TO PREPARE AND SMOOTH ORIGINAL GROUND FOR PLACEMENT OF 6" OF *3 CRUSHED STONE OR GRAVEL ENTRANCE MATERIAL UP TO THE EDGE OF PAVEMENT.

TYPICAL CONSTRUCTION ENTRANCE SECTION NOT TO SCALE





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-TOP OF EMBANKMENT 1'MIN. L=4xD.A. 5'MA) 1'MIN 1'MAX. -EXISTING GROUND PROFILE



CROSS SECTION A-A

STONE OUTLET SEDIMENT TRAP

OPTION: A ONE FOOT LAYER OF N.Y.S. DOT *2 STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIPRAP INPLACE OF THE EMBEDDED FILTER CLOTH.

NOTES:

- 1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
- 2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
- 3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMEN-SIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
- 4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- 5. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- 6. THE MAXIMUM DRAINAGE AREA FOR THE SEDIMENT TRAP IS 5 ACRES.

File = FilProjects) DATE = 10/17/2008 USER = kdetrick

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ROARING BROOK WIND POWER PROJECT	TOWN OF MARTINSBURG			SOIL EROSION AND SEDIMENT	CONTROL DETAILS		DATE: OCTOBER 2008 CME No.: 07-093D SCALE: AS NOTED DE
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CHECK DAM - TEMPORARY (STONE)

NOTES:

3.

TREE/VEGETATION PROTECTION BARRIER

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APPLICATION NOTES:

THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL. CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE CHECK DAM DUE TO DECREASED VELOCITY. CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT FILTER SEDIMENT FROM TURBID WATER.

1. DRAINAGE AREAS: MAXIMUM DRAINAGE AREA TRIBUTARYTO STONE CHECK DAM SHALL BE 2.0 AC.

2. MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.

STONE CHECK DAM PLACEMENT INTERVAL							
DITCH SLOPE	PLACEMENT INTERVAL ••						
1 %	75'						
2 %	38′						
3 %	25'						
4 %	19'						
5 %	15'						
6 %	13'						
8 %	10'						
10 %	8'						

•• BASED ON 9" TYPICAL HEIGHT





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1. THE MAXIMUM POST SPACING REQUIREMENT SHALL BE 3 FEET AND THE TOPS OF POSTS SHALL BE CROSS BRACED.

 SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE SILT FENCE.
THE MAXIMUM DRAINAGE AREA TO THE CULVERT BEING PROTECTED IS 1 ACRE.

NOTES

- 1. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE STONE BERM.
- 2. TIE THE STONE BERM INTO THE CULVERT EMBANKMENT A MINIMUM OF 1 FOOT ABOVE THE DESIGN ELEVATION OF THE STONE BERM.
- 3. STONE CULVERT INLET PROTECTION TO BE USED WHERE DRAINAGE AREA EXCEEDS 1 ACRE.









1) ALL SLOPES SHALL BE BROUGHT TO FINISHED GRADE AND TRIMMED AS SOON AS POSSIBLE.

2) PERMANENT EROSION CONTROL MEASURES OF SEEDING AND MULCHING (SEED ONLY WITHIN SEEDING DATES) SHALL BE CARRIED OUT ONCE THE SLOPES HAVE REACHED FINAL GRADE. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE TEMPORARY SLOPE TREATMENT TABLE SHALL BE EMPLOYED AS INDICATED OR IN THE TEMPORARY MULCH NOTE.

3) IF THE DITCH CANNOT BE COMPLETED FOR SOME REASON, THEN THE EROSION CONTROL MEASURES SHOLD BE COMPLETED TO THE TOP OF THE DITCH BACKSLOPE.

MAINTENANCE OF SLOPE PROTECTION NOTES

1) MAINTENANCE OF MULCHED AREAS SHALL INCLUDE RE-MULCHING OF AREAS IN WHICH SOIL BECOMES EXPOSED TO VIEW. ANY AREAS THAT BECOME SETTLED OR GULLIED DURING MULCHING OPERATIONS SHALL BE REPAIRED WITHIN 3 DAYS OR THE ONSET OF INCLEMENT WEATHER.

2) MULCH ANCHORAGE (TACK) SHALL BE APPLIED TO HOLD MULCH IN PLACE.

3) MAINTENANCE OF TEMPORARY SEEDED AREAS SHALL INCLUDE RE-SEEDING AS NEEDED (OR AOBE) TO ESTABLISH A SATISFACTORY STAND OF TURF.

4) ALL TEMPORARY TREATMENT SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE EROSION CONTROL MEASURE.

5) MAINTENANCE OF ROLLED EROSION CONTROL PRODUCT SHALL INCLUDE RE-GRADING OF AREAS THAT BECOME SETTLED OR GULLIED DURING INSTALLATION. ANY EDGES THAT BECOME LOOSE OR EXPOSED SHALL BE RE-INSTALLED.

TEMPORARY SLOPE TREATMENT TABLE SEE SLOPE PROTECTION NOTES								
CRITERIA	FLAT SLOPES LESS THAN 1 ON 3	STEEP SLOPES 1 ON 3 OR STEEPER						
"I PRIOR TO ANY ANTICIPATED PRECIPITATION	TEMPORARY MULCH	TEMPORARY MULCH						
*2 NO WORK ON SLOPES FOR UP TO 3-14 CONSECUTIVE DAYS	TEMPORARY MULCH	TEMPORARY MULCH						
■3 NO WORK ON SLOPES FOR OVER 14 DAYS - 60 DAYS	TEMPORARY SEED AND MULCH	TEMPORARY SEED AND MULCH JUTE MESH						
■4 OVER 60 DAYS (WINTER OVER)	TEMPORARY SEED AND MULCH JUTE MESH	TEMPORARY SEED AND MULCH NYSDOT ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE 8						



TEMPORARY SEEDING AND MULCHING GUIDES - FILL SLOPES

(NOT TO SCALE)

TEMPORARY MULCH

MULCHING OF AREAS LARGER THAN 120 SQUARE YARDS MUST BE COMPLETED USING MECHANICAL SPREADERS OR BLOWERS, AND TACKING OF THE MULCH WILL BE REQUIRED.

THE CONTRACTOR SHALL HAVE THE CAPABILITY TO MULCH ANY DISTURBED AREAS ON ANY GIVEN DAY (E.G. THOSE AREAS WHERE EARTHWORK OPERATIONS ARE ONGOING, ETC.), THE ENGINEER IN CHARGE SHALL DIRECT THE CONTRACTOR TO LIMIT THE AREA OF CLEARING AND GRUBBING, EXCAVATION, BORROW, AND EMBANKMENT OPERATIONS IN PROGRESS, COMMENSURATE WITH THEIR CAPABILITY AND PROGRESS IN KEEPING THE FINISH GRADING, MULCHING, SEEDING AND OTHER TEMPORARY AND/OR PERMANENT CONTROL MEASURES.

UNDER NO CONDITION, SHALL ANY AREA OF UNPROTECTED ERODIBLE EARTH MATERIAL EXPOSED BY CLEARING AND GRUBBING, EXCAVATION, BORROW, FILL, OR OTHER WORK BE LEFT IN AN UNPROTECTED CONDITION. ANY PORTION OF AN AREA ON WHICH CLEARING AND GRUBBING, EXCAVATION, BORROW, FILL, OR OTHER WORK WITHIN THE R.O.W. HAD PERMANENTLY CEASED SHALL BE STABILIZED, BY EITHER TEMPORARY OR PERMANENT MEANS. THE CONTRACTOR WILL ALSO BE AWARE OF IMPENDING WEATHER CONDITIONS AND THE NEED TO APPLY MULCH ON AREAS THAT WORK IS PROGRESSING.

THE CONTRACTOR MUST CONTINUALLY BE PREPARED TO REPAIR AND REMULCH DISTURBED SOIL AREAS TO PROVIDE NECESSARY COVERAGE TO LOCATIONS THAT HAVE BEEN DAMAGED BY STORMS OR EQUIPMENT. SHOULD THE ENGINEER DETERMINE THAT AT ANY TIME THAT THE MULCH HAS NOT STABILIZED THE PROJECT AREA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMULCHING AND ALL ADDITIONAL WORK NECESSARY TO CORRECT THE PROBLEM SHALL BE AT THE CONTRACTOR'S EXPENSE. THIS WORK WILL BE REQUIRED FOR ALL AREAS ASSOCIATED WITH THE PROJECT AND WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN THE SAME STANDARDS FOR ALL OFF SITE AREAS ASSOCIATED WITH THE PROJECT. THE COST OF THAT WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

MULCHING IS THE PRIMARY EROSION PREVENTION METHOD TO BE USED, AND WAS INCLUDED IN THE PROJECT TO SATISFY THE REQUIREMENTS OF THE LAWS, REGULATIONS AND/OR OTHER PERMIT CONDITIONS NEEDED TO COMPLETE THE WORK PROPOSED IN THIS PROJECT, MULCHING PLAYS A MAJOR ROLE IN MAINTAINING THE WATER QUALITY OF WATER BODIES AND WETLANDS.



	_			_			XX	Å
							wm/dd/y	DATE
							Description	REVISION
ľ				_			1	o N
	Contact: Jenny L. Burke	Phone: (315) 376-4316						1001 3 30ate 3t, 3dite 201 - LOWVIIIE, NT 10301
	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND / OR LOCAL LAWS		PROGRESS	L N N N	NOT FOR	CONSTRUCTION		
	Drewing Copyright © 2008 Chejotan Marching Engineering, LLP				CREIGHTON MANNING ENGINEERING, LLP	17 COMPUTER DRIVE WEST - ALBANY - NEW YORK - 12205	F: (310) 440-0330 F: (310) 440-038/ WWW.CMIELLF.COM	SIGNED: D.A.T. DRAWN BY: K.H.D. CHECKED: R.W.O.
	ROARING BROOK WIND POWER PROJECT				SOIL EROSION AND SEDIMENT	CONTROL DETAILS		DATE: OCTOBER 2008 CME No.: 07-093D SCALE: AS NOTED DE
		E	5	Γ		-{	B	
	SHE	ET NU	ΜВ	ER		##	of	##



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SECTION B-B



SECTION A-A



STONE LINED APRON DETAIL

ENGTH TABLE
MIN. LENGTH "L"
8'
8'
8'
11'
13'
15′
20'

BASED ON NRCS CHARTS FOR A TAILWATER CONDITION OF ONE HALF OF A PIPE DIAMETER OR GREATER.



+





1'-0" (TYP.)

+



BURIED PIPE DETAIL





FILE = F:Nrojects/20 DATE = 10/17/2008 USER = bdillenback



FILE = FivProjects/200 DATE = 10/17/2008 USER = kawertz



FILE = F:NprojectsNi DATE = 10/17/2008 USER = kswartz







FILE = F:NProjects/2 DATE = 10/17/2008 USER = kswartz

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FILE = f:\projects\20 DATE = 10/17/2008 USER = dteator

APPENDIX C PRELIMINARY CONSTRUCTION PLANS O & M BUILDING



ast Saved by: Kyle Swarz Diat Date: October 6, 2008 H:57 PM Tile Name: F:NPojects/2007/07-093d/cadd/dvg/OM Facility Concept PI

APPENDIX D PRELIMINARY CONSTRUCTION PLANS SUBSTATION



NOTES:

- 1. SITE PLAN BASED ON DRAWING TITLED "MAP SHOWING LANDS OF JD REALTY OF LOWVILLE, LLC" AND PREPARED BY THEW ASSOCIATES PE-LS, PLLC., DATED 5/20/08.
- GRADING OF ACCESS ROAD WILL EXTEND BEYOND CURRENT SURVEY CONTOUR LINES ON THE EAST SIDE OF THE SWITCHING STATION WHEN MORE SURVEY DATA IS AVAILABLE



\					
\mathbf{h}					
Site Benchma Elev. 1,14	ark No. 1 7.23		30' 60' LE: 1"=30'-0"	AR and com	MENT
	0-	-29-2008			
GINEERING RECORD	DATE	ROARING	BROOK WIND PO	WER FACI	i ity
AWN: ICB	8/6/08	34.5/1154	COLLECTOR AND INTE	RCONNECT	SUBS
ECKED: DV	8/22/08		PADINIC AND SITE		0000
PROVED: DF	8/29/08		AND SIL	I LAN	
DFILE: 2795C-1		SCALE: 1"=30'	DWG.NO. C-1	SHEET 1	REV A

APPENDIX E BMP SPECIFICATIONS

STANDARD AND SPECIFICATIONS FOR DUST CONTROL



Definition

The control of dust resulting from land-disturbing activities.

Purpose

To prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems.

Conditions Where Practice Applies

On construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing where off-site damage may occur if dust is not controlled.

Design Criteria

Construction operations should be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation should be left where practical. Temporary or permanent stabilization measures shall be installed. No specific design criteria is given; see construction specifications below for common methods of dust control.

Water quality must be considered when materials are selected for dust control. Where there is a potential for the material to wash off to a stream, ingredient information must be provided to the local permitting authority.

Construction Specifications

A. Non-driving Areas – These areas use products and materials applied or placed on soil surfaces to prevent airborne migration of soil particles.

Vegetative Cover – For disturbed areas not subject to traffic, vegetation provides the most practical method of dust control (see Section 3).

Mulch (including gravel mulch) – Mulch offers a fast effective means of controlling dust. This can also include rolled erosion control blankets.

Spray adhesives – These are products generally composed of polymers in a liquid or solid form that are mixed with water to form an emulsion that is sprayed on the soil surface with typical hydroseeding equipment. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations for the specific soils on the site. In no case should the application of these adhesives be made on wet soils or if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators and others working with the material.

B. Driving Areas – These areas utilize water, polymer emulsions, and barriers to prevent dust movement from the traffic surface into the air.

Sprinkling – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access routes.

Polymer Additives – These polymers are mixed with water and applied to the driving surface by a water truck with a gravity feed drip bar, spray bar or automated distributor truck. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations. Incorporation of the emulsion into the soil will be done to the appropriate depth based on expected traffic. Compaction after incorporation will be by vibratory roller to a minimum of 95%. The prepared surface shall be moist and no application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators working with the material.

Barriers – Woven geotextiles can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads. Stone can also be used for construction roads for effective dust control.

Windbreak – A silt fence or similar barrier can control air currents at intervals equal to ten times the barrier height. Preserve existing wind barrier vegetation as much as practical.

All Stormwater Pollution Prevention Plans must contain the NYS DEC issued "Conditions for Use" and "Application Instructions" for any polymers used on the site. This information can be obtained from the NYS DEC website.

Maintenance

Maintain dust control measures through dry weather periods until all disturbed areas are stabilized.

STANDARD AND SPECIFICATIONS FOR MULCHING



Definition

Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface.

Purpose

The primary purpose is 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 for temporary stabilization in nongrowing months.

Conditions Where Practice Applies

On soils subject to erosion and on new seedings and shrub plantings. Mulch is useful on soils with low infiltration rates by retarding runoff.

<u>Criteria</u>

Site preparation prior to mulching requires the installation of necessary erosion control or water management practices and drainage systems.

Slope, grade and smooth the site to fit needs of selected mulch products.

Remove all undesirable stones and other debris to meet the needs of the anticipated land use and maintenance required.

Apply mulch after soil amendments and planting is accomplished or simultaneously if hydroseeding is used.

Select appropriate mulch material and application rate or material needs. Determine local availability.

Select appropriate mulch anchoring material.

NOTE: The best combination for grass/legume establishment is straw (cereal grain) mulch applied at 2 ton/ acre (90 lbs./1000sq.ft.) and anchored with wood fiber mulch (hydromulch) at 500 - 750 lbs./acre (11 - 17lbs./1000 sq. ft.). The wood fiber mulch must be applied through a hydroseeder immediately after mulching.

Mulch Material	Quality Standards	per 1000 Sq. Ft.	per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs.	10-20 tons	2-7''	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green dye and dispersing agent	50 lbs.	2,000 lbs.	_	Apply with hydromulcher. No tie down required. Less erosion control provided than 2 tons of hay or straw.
Gravel, Crushed Stone or Slag	Washed; Size 2B or 3A—1 1/2"	9 cu. yds.	405 cu. yds.	3"	Excellent mulch for short slopes and around plants and ornamentals. Use 2B where subject to traffic. (Approximately 2,000 lbs./cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried; free of undesirable seeds & coarse materials	90-100 lbs. 2-3 bales	2 tons (100-120 bales)	cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environment for germinating seeds.
Jute twisted yarn	Undyed, unbleached plain weave. Warp 78 ends/yd., Weft 41 ends/ yd. 60-90 lbs./roll	48" x 50 yds. or 48" x 75 yds.		-	Use without additional mulch. Tie down as per manufacturers specifications. Good for center line of concentrated water flow.
Excelsior wood fiber mats	Interlocking web of excelsior fibers with photodegradable plastic netting	8" x 100" 2-sided plastic, 48" x 180" 1-sided plastic			Use without additional mulch. Excellent for seeding establishment. Tie down as per manufacturers specifications. Approximately 72 lbs./roll for excelsior with plastic on both sides. Use two sided plastic for centerline of waterways.
Compost	Up to 3" pieces, moderately to highly stable	3-9 cu. yds.	134-402 cu. yds.	1-3"	Coarser textured mulches may be more effective in reducing weed growth and wind erosion.
Straw or coconut fiber, or combination	Photodegradable plastic net on one or two sides	Most are 6.5 ft. x 3.5 ft.	81 rolls		Designed to tolerate higher velocity water flow, centerlines of waterways, 60 sq. yds. per roll.

Table 3.7Guide to Mulch Materials, Rates, and Uses

Table 3.8Mulch Anchoring Guide

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
1. Peg and Twine	Hay or straw	After mulching, divide areas into blocks approximately 1 sq. yd. in size. Drive 4-6 pegs per block to within 2" to 3" of soil surface. Secure mulch to surface by stretching twine between pegs in criss-cross pattern on each block. Secure twine around each peg with 2 or more tight turns. Drive pegs flush with soil. Driving stakes into ground tightens the twine.
2. Mulch netting	Hay or straw	Staple the light-weight paper, jute, wood fiber, or plastic nettings to soil surface according to manufacturer's recommendations. Should be biodegradable. Most products are not suitable for foot traffic.
3. Wood cellulose fiber	Hay or straw	Apply with hydroseeder immediately after mulching. Use 500 lbs. wood fiber per acre. Some products contain an adhesive material ("tackifier"), possibly advantageous.
4. Mulch anchoring tool	Hay or straw	Apply mulch and pull a mulch anchoring tool (blunt, straight discs) over mulch as near to the contour as possible. Mulch material should be "tucked" into soil surface about 3".
5. Tackifier	Hay or straw	Mix and apply polymeric and gum tackifiers according to manufacturer's instructions. Avoid application during rain. A 24-hour curing period and a soil temperature higher than 45 ⁰ Fahrenheit are required.

APPENDIX F STORMWATER CALCULATIONS



JOB	07-093d			
SHEET NO.		1	OF	1
CALCULATED BY	BWE		DATE	8/6/2008
CHECKED BY			DATE	
SCALE	Flow Rates			

			F	Rational Me	thod			
 DR No.	Watershed	с	Hydraulic Length	Height	Tc	I 25	Q 25	
	ac		ft	ft	min.	in/hr	cfs	
 A	26	0.20	1,500	32	10	6.84	36	
 В	17	0.20	1,475	36	9	7.06	25	
 с	504	0.20	9,980	70	63	3.00	302	
 D	10	0.20	845	28	5	8.04	16	
 E				N/A				
 F	725	0.20	12,530	76	80	2.50	363	
 G	53	0.20	2,530	46	15	5.84	61	
 н	120	0.20	3,660	58	21	4.90	118	
 I	1	0.20	325	16	2	8.04	1	
 J	12	0.20	1100	19	8	7.30	18	
 к	12	0.20	1300	36	8	7.30	18	
 L	1880	0.20	14140	126	75	2.50	940	
 м	240	0.20	5130	70	29	4.14	199	
 N	173	0.20	6450	92	34	4.00	138	
 0	54	0.20	3360	64	19	5.16	56	
 Р	119	0.20	3965	52	24	4.57	109	
 Q	17	0.20	1500	36	9	7.06	24	
 R				N/A				
 S	7	0.20	443	6	4	8.04	11	
 т	5	0.20	625	6	7	8.04	8	



JOB	07-093d			
SHEET NO.		1	OF	3
CALCULATED BY	BWE		DATE	8/8/2008
CHECKED BY			DATE	
SCALE	Flow Rates			

 				SCS Meth	od				
 DR No.	Watershed	CN	Hydraulic Length	Height	Tc	24 hr Rainafall	Q 25		
	ac		ft	ft	min.	in	cfs		
с	504	68	9980	70	63	4.20	315		
 F	725	68	12530	76	80	4.20	377		
 L	1880	68	14140	126	75	4.20	1034		



JOB	07-093d		
SHEET NO.	1	_OF	1
CALCULATED BY	BWE	DATE	8/8/2008
CHECKED BY		DATE	
SCALE	Culvert Table	e	

			Roaring Brook Wind Farm - Culvert Table				
DR No.	Pipe Size	Watershed	Q 25	Max. Pipe Slope	Headwater	Outlet Velocity	
	inches	ac	cfs	%	ft	ft/s	
A	30	26	36	1.5	3.3	11.1	
В	24	17	25	2.0	3.0	11.3	
с	(3) 36	504	315	1.0	3.8	7.2	
D	24	10	16	2.0	2.4	10.5	
E				N/A			
F	(3) 48	725	377	1.0	5.5	12.9	
G	36	53	61	1.0	4.1	10.7	
н	(2) 36	120	118	1.0	4.0	10.7	
I	18	1	1	2.0	0.5	4.8	
J	24	12	18	2.0	2.4	10.5	
к	24	12	18	2.0	2.4	10.5	
L	(4) 48	1880	1034	1.0	4.7	8.5	
м	(2) 42	240	199	1.0	5.3	11.2	
Ν	(2)36	173	138	1.0	4.6	10.5	
0	36	54	56	1.0	4.1	10.7	
Ρ	(2) 36	119	109	1.0	3.8	10.5	
Q	24	17	24	2.0	3.0	11.3	
R				N/A			
S	18	7	11	2.0	2.1	9.2	
		-	0	2.0	1.6	8.6	

Roaring Brook Wind Farm Stream/Wetland Culvert Design Approach

							Preliminary		
Culvert	Wetland	Protected Stream	Road Name	Existing Culvert	Proposed Culvert	Approach	Perm. Wetland Impacts (sq ft)	Temp. Wetland Impacts (sq ft	
						Replace with an			
А	2K	No	Alaska Hwy	24" CMP	30" HDPE	appropriately sized culvert.	547.5	0.0	
						Replace with an			
В	2L	No	Alaska Hwy	(2) 24" CMP	(2) 24" HDPE	appropriately sized culvert.	207.8	0.0	
						Replace with an			
С	2M	Yes	Alaska Hwy	(3) 30" CMP	(3) 36" HDPE	appropriately sized culvert.	1023.4	0.0	
						Replace with an			
D	2N	No	Alaska Hwy	10" (RCP)	24" HDPE	appropriately sized culvert.	544.6	0.0	
						No longer part of site			
E	-	-	Joe's Pond Rd	(2) 30" (CMP)	-	improvements.	0.0	0.0	
						Replace with 20% buried			
F	A/B	Yes (Roaring Brook)	Alaska Hwy	(3) 48" (CMP)	(3) 60" HDPE (20 % Buried)	rise circular pipe.	2170.0	0.0	
						Replace with an			
G	ЗK	No	Alaska Hwy	10" (CIP)	36" HDPE	appropriately sized culvert.	355.0	360.9	
-				• •		Replace with an			
Н	F	Yes	Fox Road	18" (CMP)	(2) 36" HDPE	appropriately sized culvert.	606.6	263.3	
						Replace with an appropriate			
1	ЗH	Yes	Fairbanks Hwy	6" (PVC)	18" HDPE	treatment.	504.5	0.0	
						Replace with an			
J	ЗH	Yes	Fairbanks Hwy	18" (CMP)	24" HDPE	appropriately sized culvert.	1318.6	0.0	
						Replace with an			
К	ЗA	No	Maple Dale Rd	15" (CIP)	24" HDPE	appropriately sized culvert.	120.3	0.0	
						Improved for construction			
L	2Z	Yes (Fish Creek)	Denali Hwy	(4) 48" (CMP)	(4) 60" HDPE (20 % Buried)	vehicles only.	1792.7	0.0	
			, , , , , , , , , , , , , , , , , , ,			Replace with an			
М	2X	Yes	Denali Hwv	30" (CMP)	(2) 42" HDPE	appropriately sized culvert.	2485.8	1813.2	
		Yes (East Branch of				Replace with 20% buried			
Ν	2E	Fish Creek)	Denali Hwv	18" (CMP), 24" (CMP)	(2) 42" HDPE (20 % Buried)	rise circular pipe.	0.0	20.9	
		,			(,) (,) (,)	Replace with an			
0	ЗA	No	Birch Road	18" (CMP)	36" HDPE	appropriately sized culvert.	619.2	332.9	
-				- (-)		Replace with an			
Р	Y	No	Birch Road	24" (HDPE)	(2) 36" HDPE	appropriately sized culvert.	486.9	532.0	
						Replace with an			
Q	Q	No	Birch Road	15" (CMP)	24" HDPE	appropriately sized culvert.	279.9	90.7	
-	-					Pipe to be removed.			
						Currently has no flow and is			
R	A/C	No	Alaska Hwv	N/A	N/A	crushed.	0.0	0.0	
S	2S/2R	No	Denali Hwy	none	18" HDPE	New culvert	0.0	557.9	
Т	2B/4P	No	French Road	none	18" HDPE	New culvert	0.0	0.0	
U	FR7	No	Flat Rock Road	none	18" HDPE	New culvert	530.2	0.0	
V	FR6	No	Flat Rock Road	none	18" HDPE	New culvert	195.1	0.0	
Ŵ	FR5	No	Flat Rock Road	none	18" HDPE	New culvert	53.4	0.0	
X	FR4	No	Flat Rock Road	none	18" HDPE	New culvert	52.4	0.0	
Y	FR3	No	Flat Rock Road	none	(2)18" HDPE	New culvert	147.7	0.0	
· ·					(2/10 1101 2	Totals [.]	14041.6	3971.8	
l egend.						l otalo.	0.32	0.09	
Logona.							0.02	0.00	

Legend: CMP Corrugated Metal Pipe RCP Reinforced Concrete Pipe CIP Cast Iron Pipe PVC Polyvinyl Chloride HDPE High Density Polyethylene

APPENDIX G NYSDEC SPDES GENERAL PERMIT



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

from

CONSTRUCTION ACTIVITY

Permit No. GP-0-08-001

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

Effective Date: May 1, 2008

Expiration Date: April 30, 2010

William R. Adriance Chief Permit Administrator

Alriana

Authorized Signature

Address:

NYS DEC Div. Environmental Permits 625 Broadway, 4th Floor Albany, N.Y. 12233-1750

eril 15, 2008

Date

SPDES General Permit for Construction Activity, GP-0-08-001

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 *NPDES (National Pollutant Discharge Elimination System)* permit or by a state permit program. New York's *SPDES (State Pollutant Discharge Elimination System)* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law ("ECL")*.

This general 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 general permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this General Permit and the NOI for New York are available by calling (518) 402-8109 or at any 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 general 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) and (15)(i), 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 can not wait until there is an actual discharge from the construction site to obtain permit coverage.

*Note: The italicized words/phrases within this permit are defined in Appendix A.
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

FROM CONSTRUCTION ACTIVITIES

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- APPENDIX D Watersheds Where 5000 SF Disturbances and Greater Must Obtain Permit Coverage
- APPENDIX E List of 303(d) Segments That Require SWPPP with Post-Construction Stormwater Management Practices
- APPENDIX F DEC Regional Office Contact Information

Part I. PERMIT COVERAGE AND LIMITATIONS

A. <u>Permit Application</u> - This permit authorizes stormwater discharges to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;

2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater discharges based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State*.

3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

B. <u>Maintaining Water Quality</u> - It shall be a violation of this general permit and the *Environmental Conservation Law ("ECL")* for any discharge authorized by this general permit 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 including, but not limited to:

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 and settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

C. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to surface waters and *groundwaters* except for ineligible *discharges* identified under subparagraph D. of this Part.

(Part I.C.)

2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater discharges from *construction activities*.

3. Notwithstanding paragraphs C.1 and C.2 above, the following non-stormwater *discharges* may be authorized by this permit: discharges from fire fighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated groundwater or spring water; uncontaminated discharges from construction site dewatering 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 general permit, and who discharge as noted in this paragraph, and with the exception of flows from fire fighting activities, these discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with water quality standards in Part I.B.

D. <u>Activities Which Are Ineligible for Coverage Under This General Permit</u> - All of the following are <u>not</u> authorized by this permit:

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection C.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are subject to an existing *individual SPDES permit* or SPDES general permit or which are required to obtain an individual or general permit pursuant to Part VII, subparagraph K of this permit;

4. *Discharges* from *construction activities* that adversely affect a listed, or proposed to be listed, endangered or threatened species, or its critical habitat;

5. *Discharges* which are subject to an existing effluent (limitation) guideline addressing stormwater and/or process wastewater unless said guidelines are contained herein; or

(Part I.D.)

6. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations.

7. Construction activities for residential, commercial and institutional projects that:

a. an *owner or operator has* not made any application, prior to January 8, 2008, for any governmental approvals required for the total project; and

b. are tributary to waters of the state classified as AA and AA-s; and

c. disturb one or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.

8. Construction activities for residential, commercial and institutional projects that:

a. have not been authorized by or covered under a SPDES General Permit for Stormwater Discharges from Construction Activity by June 29, 2009; and

b. an *owner or operator has* made any application, prior to January 8, 2008, for any governmental approvals required for the total project; and

c. are tributary to waters of the state classified as AA or AA-s; and

d. disturb one or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.

9. Construction activities for public roadway and linear utility projects that:

a. have not been authorized by or covered under a SPDES General Permit for Stormwater Discharges from Construction Activity by June 29, 2009; and

b. are tributary to waters of the state classified as AA or AA-s; and

c. disturb two or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.

(Part I.D.)

10. *Construction activities* that adversely affect a property that is listed or is eligible for listing on the State or National Register of Historic Places.

Part II. OBTAINING PERMIT COVERAGE

A. Notice of Intent (NOI) Submittal

1. An *owner or operator* must first develop a Stormwater Pollution Prevention Plan (SWPPP) in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) form to the address below in order to be authorized to discharge under this general permit. The NOI form shall be one which is associated with this general permit, signed in accordance with Part VII.H. of this permit.

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

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* shall have their SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department. Beginning on September 30, 2008, the *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person, and then submit that form along with the NOI to the address referenced under "Notice of Intent (NOI) Submittal". This requirement does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (Change of Owner or Operator).

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

B. <u>Permit Authorization</u>

1. An *owner or operator* shall not *commence construction activity* until their authorization to discharge under this permit goes into effect.

(Part II.B.)

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 SEQR is applicable,

b. where required, all necessary Department permits subject to the *Uniform Procedures Act (UPA)* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *Uniform Procedures Act (UPA)* permits must submit a preliminary SWPPP to the appropriate DEC Regional Office in Appendix F at the time all other necessary UPA permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this general permit,

c. the final SWPPP has been prepared, and

d. an NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above will be authorized to discharge stormwater from their *construction activity* in accordance with the following schedule:

a. For construction activities that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4* :

i. Five (5) business days from the date the Department receives a complete NOI for construction activities with a SWPPP that has been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 and/or 3, or

ii. Sixty (60) business days from the date the Department receives a complete NOI for construction activities with a SWPPP that has <u>not</u> been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 or 3.

(Part II.B.3.)

b. For construction activities that are subject to the requirements of a *regulated, traditional land use control MS4* :

i. Five (5) business days from the date the Department receives a complete NOI and signed "MS4 SWPPP Acceptance" form.

4. The Department may suspend or deny an *owner's or operator's* coverage under this permit if the Department determines that the SWPPP does not meet the permit requirements.

5. Coverage under this permit authorizes stormwater discharges from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater discharges from future areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department.

C. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (NOT) has been submitted to the address referenced in Part II.A.1.

2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-08-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form and inspection reports at the construction site until all disturbed areas have achieved *final stabilization* and the Notice of Termination 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; that is accessible during normal working hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated*, *traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.B. every seven (7) calendar days, for as long as greater than five (5) acres of soil remain

(Part II.C.3.a.)

disturbed. When performing just two (2) inspections every seven (7) calendar days, the inspections shall be separated by a minimum of two (2) full calendar days.

b. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control.

c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

d. The *owner or operator* shall install any additional site specific practices needed to protect water quality.

e. The *owner or operator* shall include the requirements above in their SWPPP.

4. The Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements.

D. Permit Coverage for Discharges Authorized Under GP-02-01

1. Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-02-01), an owner or operator of a *construction activity* with coverage under GP-02-01, as of the effective date of GP-0-08-001, shall be permitted to discharge in accordance with GP-0-08-001 unless otherwise notified by the Department.

E. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, <u>in writing</u>, 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 Notice of Termination (NOT) with the name and permit identification number of the new *owner or operator* to the Department at the

(Part II.E.1.)

address in Part II.A.1.. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the general permit. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*.

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.

5. 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, 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 the construction of all post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of these contractors and subcontractors identify at least one *trained individual* from their company that will be responsible for implementation of the SWPPP. The *owner or operator* shall ensure that at least one *trained individual* is on site on a daily basis when soil disturbance activities are being performed.

(Part III.A.5.)

The *owner or operator* shall have each of these contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained individual(s)* 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.

6. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, (or as otherwise indicated by the Department) the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit.

7. For projects where the Department requests a copy of the SWPPP, the *owner or operator* shall submit the SWPPP in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

(Part III.A.)

8. The SWPPP must include documentation supporting the determination of permit eligibility with regard to Part I.D.10. (Historic Places). At a minimum, the supporting documentation shall include the following:

a. Information on whether the stormwater discharge or *construction activities* would have an effect on a property that is listed or eligible for listing on the State or National Register of Historic Places;

b. Results of historic places screening determinations conducted. Information regarding the location of places listed, or eligible for listing, on the State or National Register of Historic Places should be obtained by consulting with the New York State Historic Preservation Office, NYS Office of Parks, Recreation and Historic Preservation (OPRHP), Peebles Island Resources Center, P.O. Box 189, Waterford, NY 12188-0189, phone: (518) 237-8643, or using the GIS online resources available at: http://nysparks.state.ny.us/shpo/;

c. A description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the State or National Register of Historic Places. If the *owner or operator* fails to describe and implement such measures, the stormwater discharge is ineligible for coverage under this permit; and

d. Where effects may occur, any written agreements that the *owner or operator* has made with the OPRHP or other governmental agency to mitigate those effects, or local land use approvals evidencing the same.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this general permit shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control. Where erosion and sediment control practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:

a. Background information about the scope of the project, including the location, type and size of project;

b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s), wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);

c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);

d. A construction phasing plan and sequence of operations describing the intended order of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;

e. A description of the minimum erosion and sediment control practices to be installed or implemented for each construction activity that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;

f. A temporary and permanent soil stabilization plan that meets the requirements of the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of final stabilization;

g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;

h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

i. An inspection schedule for the *owner or operator*, or the contractor(s) or subcontractor(s) identified in Part III.A.5., to ensure continuous and effective operation of the erosion and sediment control practices. The inspection schedule shall be in accordance with the requirements in the most

(Part III.B.1.i.)

current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control;

j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the storm water 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

1. Identification of any elements of the design that are not in conformance with the technical standard, New York Standards and Specifications for Erosion and Sediment Control. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards.

2. Post-construction stormwater management practice component - All construction projects identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual"). Where post-construction stormwater management practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard. At a minimum, the post-construction stormwater management of the SWPPP shall include the following:

a. Identification of all post-construction stormwater management practices to be constructed as part of the project;

b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;

c. The dimensions, material specifications and installation details for each post-construction stormwater management practice;

d. Identification of any elements of the design that are not in conformance with the Design Manual. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards; e. A hydrologic and hydraulic analysis for all structural components of the stormwater management control system;

f. A detailed summary (including calculations) of the sizing criteria that was used to design all post-construction stormwater management practices. At a minimum, the summary shall address the required design criteria from the applicable chapter of the Design Manual; including the identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required based on the redevelopment criteria or waiver criteria included in the Design Manual; and

g. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York State Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.g. above.

C. <u>Required SWPPP Components by Project Type</u> - Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. <u>General Construction Site Inspection and Maintenance Requirements</u>

1. The *owner or operator* must ensure that all erosion and sediment control practices identified in the SWPPP are maintained in effective operating condition at all times.

(Part IV.A.)

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the Environmental Conservation Law, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Owner or Operator Inspection Requirements

1. An *owner or operator* shall, in accordance with the requirements in the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control, inspect the erosion and sediment controls identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *owner or operator* can stop conducting inspections. The *owner or operator* shall begin conducting inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting 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

1. An *owner or operator* of the following *construction activities* shall have a *qualified inspector* conduct site inspections in conformance with the requirements of Part IV.C. below:

a. All *construction activities* identified in Table 1 and 2 of Appendix B, <u>with</u> the exception of:

(i) the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out and the construction of a single family home that involve soil disturbances of one (1) or more acres of land but less than five (5) acres and are <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;

(ii) construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and

(iii) construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

2. Unless otherwise notified by the Department, the *owner or operator* shall have a *qualified inspector* 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. When performing just two (2) inspections every seven (7) calendar days, the inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) in writing prior to reducing the frequency of inspections.

d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) 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(s)* perform a final inspection and certify that all disturbed areas

(Part IV.C.2.d.)

have achieved *final stabilization*, <u>and</u> 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 Notice of Termination (NOT). The *owner or operator* shall then submit the completed NOT form to the address in Part II.A.1..

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, 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. Identification of all erosion and sediment control practices that need repair or maintenance;

f. Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

g. 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;

h. 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; and

i. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s).

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.5. of any corrective actions that need to be taken. The contractor (or subcontractor) shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.C.2., the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. <u>Termination of Permit Coverage</u>

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed Notice of Termination (NOT) form to the address in Part II.A.1. The NOT form shall be one which is associated with this general permit, signed in accordance with Part VII.H.

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

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; <u>and</u> all areas disturbed as of the project shutdown date 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 required for the completed

(Part V.A.2.b.)

portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E..

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall 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.

4. For *construction activities* meeting subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the Notice of Termination, 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 deed restriction in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan,.

d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. <u>REPORTING AND RETENTION OF RECORDS</u>

A. The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the site achieves *final stabilization*. This period may be extended by the Department, in its sole

(Part VI.A.)

discretion, at any time upon written notification.

B. <u>Addresses</u> - With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DEC Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. <u>Duty to Comply</u> - 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 permit non-compliance 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 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* or the *owner's or operator's* on-site representative.

B. <u>Continuation of the Expired General Permit</u> - This permit expires two (2) years from the effective date. However, coverage may be obtained under the expired general permit, which will continue in force and effect, until a new general permit is issued. After issuance of a new general permit, those with coverage under GP-0-08-001 will have six (6) months from the effective date of the new general permit to complete their project or obtain coverage under the new permit. Unless otherwise notified by the Department in writing, an *owner or operator* authorization under the new general permit must submit a new NOI in accordance with the terms of such new general permit.

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

D. <u>Need to Halt or Reduce Activity Not a Defense</u> - It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. 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.

(Part VII.)

F. <u>Duty to Provide Information</u> - The *owner or operator* shall make available to the Department for inspection and copying or furnish to the Department within five (5) business days of receipt of a Department request for such information, any information requested for the purpose of determining compliance with this general permit. This can include, but is not limited to, the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, executed maintenance agreement, and inspection reports. Failure to provide information requested by the Department shall be a violation of this permit.</u>

G. <u>Other Information</u> - When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any other report, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or impervious area) which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information. 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 permit violation.

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 compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or

(Part VII.H.1.)

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

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. The SWPPP and other information requested by the Department shall be signed by a person described above 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 above;

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 is 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.

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

I. <u>**Property Rights**</u> - The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

(Part VII.)

J. <u>Severability</u> - The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Denial of Coverage Under This Permit

1. At its sole discretion, the Department may require any *owner or operator* authorized by this permit to apply for and/or obtain either an individual SPDES permit or an alternative 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 permittee's receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Regional Water Engineer, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. Any *owner or operator* authorized by this permit may request to be excluded from the coverage under this permit by applying for an individual permit or an alternative general permit. In such cases, the *owner or operator* shall submit an individual application or an alternative general permit application in accordance with the requirements of this general permit,40 CFR 122.26(c)(1)(ii) and 6 NYCRR Part 621, with reasons supporting the request, to the Department at the address for the appropriate Department Office (see addresses in Appendix F). The request may be granted by issuance of an individual permit or an alternative general permit at the discretion of the Department.

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

L. <u>**Proper Operation and Maintenance**</u> - The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

(Part VII.)

M. <u>Inspection and Entry</u> - The *owner or operator* shall allow the Department or an authorized representative of EPA, the State, or, in the case of a construction site which discharges through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

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

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. <u>**Permit Actions**</u> - At the Department's sole discretion, this permit may, at any time, be modified, revoked, or renewed. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. <u>Definitions</u> - Definitions of key terms are included in Appendix A of this permit.

P. <u>Re-Opener Clause</u>

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Permit modification or revocation will be conducted in accordance with 6 NYCRR Part 621 and 6 NYCRR 750-1.18.

APPENDIX A

Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "Construction Activity(ies)" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or point source.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in

which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Impervious Area (Cover) - means all impermeable surfaces that can not effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a *combined sewer*; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from construction activity.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the construction activity is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in Parts 700 et seq of this Title.

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), licensed Landscape Architect, or other Department endorsed individual(s). It also means someone working under the direct supervision of the licensed Professional Engineer or licensed 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 an individual performing a site inspection has received four (4) hours of training, endorsed by the Department, from a Soil and Water Conservation District, CPESC, Inc. or other Department endorsed entity in proper erosion and sediment control principles no later than two (2) years from date this general permit is issued. After receiving the initial training, an individual working under the direct supervision of the licensed Professional Engineer or licensed Landscape Architect shall receive four (4) hours of training every three (3) years. 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, licensed Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer <u>licensed to practice in the State of New York.</u>

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 sheetflow drainage connection from the highway surface to the highway ditch or embankment,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Trained Individual - means an employee from a contracting (construction) firm that has received four (4) hours of training, which has been endorsed by the Department, from a Soil and Water Conservation District, CPESC, Inc. or other Department endorsed entity, in proper erosion and sediment control principles no later than two (2) years from the date this general permit is issued. After receiving the initial training, the trained individual shall receive four (4) hours of training every three (3) years. This individual will be responsible for 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 and <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 following	g construction activities that involve soil disturbances of one (1) or more acres of land:
•	Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects Bike paths and trails
•	Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project Slope stabilization projects
•	Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics Spoil areas that will be covered with vegetation
•	Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that <i>alter hydrology from pre to post development</i> conditions
•	Athletic fields (natural grass) that do not include the construction or reconstruction of <i>impervious</i> area and do not alter hydrology from pre to post development conditions
•	Demolition project where vegetation will be established and no redevelopment is planned Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with <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 and one (1) a	y construction activities that involve soil disturbances between five thousand (5000) square feet cre of land:
•	All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

Table 2

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

The following construction activities that involve soil disturbances of one (1) or more acres of land:		
The following of	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 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, and apartment complexes Airports Amusement parks Campgrounds 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 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 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	
•	Parking lot construction or reconstruction Athletic fields (natural grass) 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 Athletic fields with artificial turf Permanent access roads or parking areas surfaced with <i>impervious cover</i> , and substations	
•	constructed as part of an over-head electric transmission line project, wind-power project or cell tower project All other construction activities that include the construction or reconstruction of <i>impervious area</i> and alter the hydrology from pre to post development conditions, and are not listed in Table 1	

APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River Figure 1
- Onondaga Lake Watershed Figure 2
- Greenwood Lake Watershed -Figure 3









Figure 3 - Greenwood Lake Watershed


APPENDIX D

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivision construction activities that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

COUNTY	WATERBODY	COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond	Madison	Chittenango Creek
Albany	Basic Creek Reservoir	Madison	DeRuyter Reservoir
Bronx	Van Cortlandt Lake	Monroe	Genesee River, Lower, Main Stem
Broome	Whitney Point Lake/Reservoir	Monroe	Genesee River, Middle, Main Stem
Broome	Beaver Lake	Monroe	Black Creek, Lower, and minor tribs
Broome	White Birch Lake	Monroe	Buck Pond
Cayuga	Little Sodus Bay	Monroe	Long Pond
Chautauqua	Chautauqua Lake, North	Monroe	Cranberry Pond
Chautauqua	Chautauqua Lake, South	Nassau	Glen Cove Creek, Lower, and tribs
Chautauqua	Bear Lake	Nassau	LI Tribs (fresh) to East Bay
Chautauqua	Lower Cassadaga Lake	Nassau	East Meadow Brook, Upper, and tribs
Chautauqua	Middle Cassadaga Lake	Nassau	Hempstead Bay
Chautauqua	Findley Lake	Nassau	Hempstead Lake
Clinton	Great Chazy River, Lower, Main Stem	Nassau	Grant Park Pond
Columbia	Kinderhook Lake	Niagara	Bergholtz Creek and tribs
Columbia	Robinson Pond	Oneida	Ballou, Nail Creeks
Dutchess	Hillside Lake	Onondaga	Ley Creek and tribs
Dutchess	Wappinger Lakes	Onondaga	Onondaga Creek, Lower
Dutchess	Fall Kill and tribs	Onondaga	Harbor Brook, Lower, and tribs
Dutchess	Rudd Pond	Onondaga	Ninemile Creek, Lower, and tribs
Erie	Rush Creek and tribs	Ontario	Honeoye Lake
Erie	Ellicott Creek, Lower, and tribs	Ontario	Hemlock Lake Outlet and minor tribs
Erie	Beeman Creek and tribs	Oswego	Lake Neatahwanta
Erie	Murder Creek, Lower, and tribs	Oswego	Oneida Lake
Erie	South Branch Smoke Cr, Lower, and tribs	Putnam	Oscawana Lake
Erie	Little Sister Creek, Lower, and tribs	Putnam	Lake Carmel
Genesee	Black Creek, Upper, and minor tribs	Queens	Jamaica Bay, Eastern, and tribs (Queens)
Genesee	Tonawanda Creek, Middle, Main Stem	Queens	Bergen Basin
Genesee	Tonawanda Creek, Upper, and minor tribs	Queens	Shellbank Basin
Genesee	Little Tonawanda Creek, Lower, and tribs	Rensselaer	Snyders Lake
Genesee	Oak Orchard Creek	Richmond	Grasmere, Arbutus and Wolfes Lakes
Genesee	Bowen Brook and tribs	Saratoga	Dwaas Kill and tribs
Genesee	Bigelow Creek and tribs	Saratoga	Tribs to Lake Lonely
Greene	Schoharie Reservoir	Saratoga	Lake Lonely
Greene	Sleepy Hollow Lake	Schenectady	Collins Lake
Herkimer	Steele Creek tribs	Schoharie	Engleville Pond
Jefferson	Moon Lake	Schoharie	Summit Lake
Kings	Hendrix Creek	St.Lawrence	Black Lake Outlet/Black Lake
Livingston	Conesus Lake	Steuben	Lake Salubria
Livingston	Jaycox Creek and tribs	Suffolk	Millers Pond
Livingston	Mill Creek and minor tribs	Suffolk	Mattituck (Marratooka) Pond

SPDES General Permit for Construction Activity, GP-0-08-001

APPENDIX E

ont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Suffolk	Tidal tribs to West Moriches Bay		
Suffolk	Canaan Lake		
Suffolk	Lake Ronkonkoma		
Tompkins	Cayuga Lake, Southern End		
Ulster	Ashokan Reservoir		
Ulster	Esopus Creek, Upper, and minor tribs		
Warren	Lake George		
Warren	Tribs to L.George, Village of L George		
Warren	Huddle/Finkle Brooks and tribs		
Warren	Indian Brook and tribs		
Warren	Hague Brook and tribs		
Washington	Tribs to L.George, East Shore		
Washington	Cossayuna Lake		
Wayne	Blind Sodus Bay		
Wayne	Port Bay		
Wayne	Marbletown Creek and tribs		
Westchester	Peach Lake		
Westchester	Mamaroneck River, Lower		
Westchester	Mamaroneck River, Upper, and minor tribs		
Westchester	Sheldrake River		
Westchester	Blind Brook, Lower		
Westchester	Blind Brook, Upper, and tribs		
Westchester	Lake Lincolndale		
Westchester	Lake Meahaugh		
Wyoming	Java Lake		
Wyoming	Silver Lake		

Note: The list above identifies those waters from the final New York State "2006 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated May 17, 2007, that are impaired by silt, sediment or nutrients.

APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

<u>Region</u>	<u>Covering the following</u> <u>counties:</u>	DIVISION OF ENVIRONMENTAL PERMITS (DEP) <u>Permit Administrators</u>	DIVISION OF WATER (DOW) <u>Water (SPDES) Program</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD Stony Brook, Ny 11790 Tel. (631) 444-0365	50 CIRCLE ROAD Stony Brook, Ny 11790-3409 Tel. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21st St. Long Island City, Ny 11101-5407 Tel. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21st St. Long Island City, Ny 11101-5407 Tel. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, Rockland, Sullivan, Ulster and Westchester	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 Hillside Avenue, Suite 1w White Plains, Ny 10603 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD, PO BOX 220 WARRENSBURG, NY 12885-0220 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

APPENDIX H NOTICE OF INTENT (NOI)

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-0-08-001 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 Information	\backslash
Owner/Operator (Company Name/Private Owner Name/Municipality Name)	
Owner/Operator Contact Person Last Name (NOT CONSULTANT)	
Owner/Operator Contact Person First Name	
Owner/Operator Mailing Address	
City	
State Zip	
Phone (Owner/Operator) Fax (Owner/Operator) - -	
Email (Owner/Operator)	_
FED TAX ID (not required for individuals)	

Project Site Informa	tion
Project/Site Name	
Street Address (NOT P.O. BOX)	
Side of Street	
O North O South O East O West	
City/Town/Village (THAT ISSUES BUILDING PERMIT)	
State Zip County	DEC Region
Name of Nearest Cross Street	
Distance to Nearest Cross Street (Feet)	Project In Relation to Cross Street O North O South O East O West
Tax Map Numbers Section-Block-Parcel	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 dropdown menu on the left and choose "Get Coordinates". Click on the center of your site and a small 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			

ΥC	loor	dina	(N	(Northing)			

3.	Select	the	predominant	land	use	for	both	pre	and	post	development	conditions.
SI	ELECT ON	NLY (ONE CHOICE F	OR EAG	СН							

Pre-Development Existing Land Use	Post-Development Future Land Use					
○ FOREST	○ SINGLE FAMILY HOME Number of Lots					
\bigcirc pasture/open land	○ SINGLE FAMILY SUBDIVISION					
○ CULTIVATED LAND	○ TOWN HOME RESIDENTIAL					
\bigcirc SINGLE FAMILY HOME	○ MULTIFAMILY RESIDENTIAL					
\bigcirc SINGLE FAMILY SUBDIVISION	○ INSTITUTIONAL/SCHOOL					
\bigcirc TOWN HOME RESIDENTIAL	\bigcirc INDUSTRIAL					
○ MULTIFAMILY RESIDENTIAL	○ COMMERCIAL					
\bigcirc INSTITUTIONAL/SCHOOL	○ MUNICIPAL					
\bigcirc INDUSTRIAL	○ ROAD/HIGHWAY					
○ COMMERCIAL	○ RECREATIONAL/SPORTS FIELD					
○ ROAD/HIGHWAY	○ BIKE PATH/TRAIL					
○ RECREATIONAL/SPORTS FIELD	\bigcirc LINEAR UTILITY (water, sewer, gas, etc.)					
○ BIKE PATH/TRAIL	O PARKING LOT					
\bigcirc LINEAR UTILITY	○ CLEARING/GRADING ONLY					
○ PARKING LOT	\bigcirc DEMOLITION, NO REDEVELOPMENT					
O OTHER	O OTHER					
4. Will future use of this site be an agricul by the NYS Agriculture and Markets Law ?	tural property as defined \bigcirc Yes \bigcirc No					
5. Is this a project which does not require c Permit (e.g. Project done under an Individua department approved remediation)?	coverage under the General al SPDES Permit, or O Yes O No					
6. Is this property owned by a state authorit government?	y, state agency or local \bigcirc Yes \bigcirc No					
7. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area. Round to the nearest tenth of an acre. Total Site Acreage To Existing Impervious Future Impervious Acreage Be Disturbed Area Within Disturbed Area Within Disturbed						
8. Do you plan to disturb more than 5 acres o	of soil at any one time? \bigcirc Yes \bigcirc No					
9. Indicate the percentage of each Hydrologic A B Q Q	Soil Group(HSG) at the site.					

10. Is this a phased project?

11. Enter the planned start and end dates of the disturbance activities.	Image: mate date date date date date date date d
12. Identify the nearest, <u>natural</u> , surface wa runoff will discharge.	terbody(ies) to which construction site
Name	
12a. Type of waterbody identified in Question 12?	
○ Wetland / State Jurisdiction On Site (Answ	ver 12b)
\bigcirc Wetland / State Jurisdiction Off Site	
\bigcirc Wetland / Federal Jurisdiction On Site (Ar	nswer 12b)
\bigcirc Wetland / Federal Jurisdiction Off Site	
🔾 Stream / Creek On Site	
\bigcirc Stream / Creek Off Site	
O River On Site	
○ River Off Site	12b. How was the wetland identified?
○ Lake On Site	○ Regulatory Map
○ Lake Off Site	○ Delineated by Consultant
\bigcirc Other Type On Site	\bigcirc Delineated by Army Corps of Engineers
O Other Type Off Site	O Other (identify)

13. Has the surface waterbody(ies) in question 12 been identified as a \bigcirc Yes \bigcirc No 303(d) segment in Appendix E of GP-0-08-001?

14. Appe	Is endi	this x C (project of GP-0-(located)8-001?	in	one	of	the	Watersheds	identified	in	\bigcirc Yes	\bigcirc No

15. Is the project located in one of the watershed areas		
associated with AA and AA-S classified waters? If no,	\bigcirc Yes	\bigcirc No
skip question 16.		

6967554732
<pre>16. 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? If Yes, what is the acreage to be disturbed?</pre>
17. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? \bigcirc Yes \bigcirc No
18. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? O Yes O No O Unknown (If No, skip question 19)
19. What is the name of the municipality/entity that owns the separate storm sewer system?
20. Does any runoff from the site enter a sewer classified as a Combined Sewer?
21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards O Yes O No and Specifications for Erosion and Sediment Control (aka Blue Book) ?
22. Does this construction activity require the development of a SWPPP that includes Water Quality and Quantity Control components (Post-Construction Stormwater Management Practices) (If No, skip questions 23 and 27-35)
23. Have the Water Quality and Quantity Control components of the SWPPP been developed in comformance with the current NYS Stormwater Management \bigcirc Yes \bigcirc No Design Manual ?

7627554736												
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)												
\bigcirc Certified Professional in Erosion and Sediment Control (CPESC)												
○ Owner/Operator												
Other Image: I												
Contact Name (Last, Space, First)												
Mailing Address												
Phone Fax												

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-0-08-001. 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.

First	Nam	e									MI
Last 3	Name	1									
Sig	natu	ire		 	·	 	-				
											Date

25. Has a construction sequence schedule for the planned management $$\odot$ Yes O No$

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- \bigcirc Check Dams
- Construction Road Stabilization
- \bigcirc Dust Control
- \bigcirc Earth Dike
- \bigcirc Level Spreader
- Perimeter Dike/Swale
- \bigcirc Pipe Slope Drain
- Portable Sediment Tank
- \bigcirc Rock Dam
- \bigcirc Sediment Basin
- \bigcirc Sediment Traps
- \bigcirc Silt Fence
- \bigcirc Stabilized Construction Entrance
- Storm Drain Inlet Protection
- Straw/Hay Bale Dike
- Temporary Access Waterway Crossing
- \bigcirc Temporary Stormdrain Diversion
- \bigcirc Temporary Swale
- Turbidity Curtain
- \bigcirc Water bars

Biotechnical

- \bigcirc Brush Matting
- Wattling

Other

Vegetative Measures

- Brush Matting
- \bigcirc Dune Stabilization
- \bigcirc Grassed Waterway
- \bigcirc Mulching
- \bigcirc Protecting Vegetation
- Recreation Area Improvement
- \bigcirc Seeding
- \bigcirc Sodding
- Straw/Hay Bale Dike
- \bigcirc Streambank Protection
- \bigcirc Temporary Swale
- \bigcirc Topsoiling
- \bigcirc Vegetating Waterways

Permanent Structural

- \bigcirc Debris Basin
- \bigcirc Diversion
- \bigcirc Grade Stabilization Structure
- \bigcirc Land Grading
- Lined Waterway (Rock)
- Paved Channel (Concrete)
- \bigcirc Paved Flume
- \bigcirc Retaining Wall
- Riprap Slope Protection
- \bigcirc Rock Outlet Protection
- \bigcirc Streambank Protection

	_																			
				-			-			-										

Post-Construction Stormwater Management Practices 27. Indicate all Stormwater Management Practice(s) that will be installed/constructed on this site: Ponds Wetlands O Micropool Extended Detention (P-1) ○ Shallow Wetland (W-1) ○ Wet Pond (P-2) ○ Extended Detention Wetland (W-2) ○ Wet Extended Detention (P-3) ○ Pond/Wetland System (W-3) ○ Multiple Pond System (P-4) ○ Pocket Wetland (W-4) ○ Pocket Pond (P-5) Infiltration ○ Infiltration Trench (I-1) Filtering ○ Surface Sand Filter (F-1) ○ Infiltration Basin (I-2) ○ Underground Sand Filter (F-2) ○ Dry Well (I-3) ○ Perimeter Sand Filter (F-3) ○ Underground Infiltration System ○ Organic Filter (F-4) Open Channels ○ Bioretention (F-5) ○ Dry Swale (0-1) \bigcirc Other \bigcirc Wet Swale (0-2) Verified Proprietary Practice Alternative Practice ○ Rain Garden ○ Hydrodynamic \bigcirc Cistern ○ Wet Vault \bigcirc Green Roof ○ Media Filter ○ Stormwater Planters O Permeable Paving (Modular Block)

Water Quality and Quantity Control

if response to Question 22 is No.

Completion of Questions 27-35 is not required

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Important:

28. Describe other stormwater management practices not listed above or explain any deviations from the technical standards.

29. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? O Yes O No If Yes, Identify the entity responsible for the long term Operation and Maintenance

30. Provide the total water quality volume required and the total provided for the site.

WQv Required WQv Provided	feet
31. Provide the following Unified Stormwater Sizing Criteria for the site <u>Total Channel Protection Storage Volume (CPv)</u> - Extended detention post-developed 1 year, 24 hour storm event	te. of
CPv Required CPv Provided	feet 2: rger
Total Overbank Flood Control Criteria (Qp) - Peak discharge rate for the series of	the 10 year storm
Total Extreme Flood Control Criteria (Qf) - Peak discharge rate for the post-development Pre-Development Post-development 	ne 100 year storm
31b. The need to provide for flood control has been waived because: O Site discharges directly to fourth order stream or la O Downstream analysis reveals that flood control is not	rger required
<u>IMPORTANT</u> : For questions 31 and 32, impervious area should be calculated project site and all offsite areas that drain to the post-construction s management practice(s). (Total Drainage Area = Project Site + Offsite a	d considering the stormwater areas)
32. Pre-Construction Impervious Area - As a percent of the <u>Total</u> <u>Drainage Area</u> enter the percentage of the existing impervious areas before construction begins.	00
33. Post-Construction Impervious Area - As a percent of the <u>Total</u> <u>Drainage Area</u> , enter the percentage of the future impervious areas that will be created/remain on the site after completion of construction.	⊘
34. Indicate the total number of post-construction stormwater management practices to be installed/constructed.	
35. Provide the total number of stormwater discharge points from the site. (include discharges to either surface waters or to separate storm sewer systems)	

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36. Identify other DEC permits tha	t are required for this project. DEC Permits
\bigcirc Air Pollution Control	\bigcirc Navigable Waters Protection / Article 15
\bigcirc Coastal Erosion	○ Water Quality Certificate
\bigcirc Hazardous Waste	○ Dam Safety
\bigcirc Long Island Wells	○ Water Supply
\bigcirc Mined Land Reclamation	○ Freshwater Wetlands/Article 24
\bigcirc Other SPDES	\bigcirc Tidal Wetlands
\bigcirc Solid Waste	\bigcirc Wild, Scenic and Recreational Rivers
\bigcirc None	\bigcirc Stream Bed or Bank Protection / Article 15
O Other	
37. Does this project require a US Permit? If Yes, Indicate Size of Impact.	Army Corps of Engineers Wetland O Yes O No
38. Is this project subject to the traditional land use control MS4? (If No, skip question 39)	requirements of a regulated, \bigcirc Yes \bigcirc No
39. Has the "MS4 SWPPP Acceptance" executive officer or ranking elect this NOI?	form been signed by the principal ed official and submitted along with \bigcirc Yes \bigcirc No
40. If this NOI is being submitted general permit for stormwater runo the former SPDES number assigned.	for the purpose of continuing coverage under a ff from construction activities, please indicate
Owner I have read or been advised of the permit understand that, under the terms of the p that this document and the corresponding aware that there are significant penaltic fine and imprisonment for knowing violati will be identified in the acknowledgment be as long as sixty (60) business days as submitting this NOI, I am acknowledging t first element of construction, and agreei permit for which this NOI is being submit	C/Operator Certification c conditions and believe that I understand them. I also bermit, there may be reporting requirements. I hereby certify documents were prepared under my direction or supervision. I am as for submitting false information, including the possibility of cons. I further understand that coverage under the general permit that I will receive as a result of submitting this NOI and can as provided for in the general permit. I also understand that, by that the SWPPP has been developed and will be implemented as the .ng to comply with all the terms and conditions of the general tted.
Print First Name Print Last Name	
Owner/Operator Signature	
	Date

APPENDIX I NYSDEC CORRESPONDENCE

APPENDIX J PERMIT COMPLIANCE FORMS

CONR 5 (5/03)

CONTRACTOR/SUBCONTRACTOR SPDES PERMIT CERTIFICATION

Contract Number D	Description	

County_____

In accordance with the requirements of the SPDES General Permit for Construction Activity, GP-02-01, each Contractor and Subcontractor identified in the Storm Water Pollution Prevention Plan (SWPPP) must certify that they understand the permit conditions and their responsibilities. Every Contractor and Subcontractor performing an activity that involves soil disturbance shall sign this certification and provide it to the Engineer prior to performing any contract work. This certification shall be signed by an Owner, Principal, President, Secretary or Treasurer of the firm in accordance with the signature requirements of '102-02, *Proposals* of the Standard Specifications.

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such 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 person to cause or contribute to a violation of water quality standards."

Firm			
Address			
City Telephone	 ()	State	Zip
Name		Signature	Date
Title			

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit Number GP-02-01 <u>Monthly Summary of Site Inspection Activities</u>

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

Permit Reference; Part III.D.3.b (page 15):

"The operator shall post at the site, in a publicly-accessible location, a summary of the site inspection activities on a monthly basis."

Date of	Type of Inspection	Name of Qualified Professional	Major items of concern related to compliance of the	Date
Inspection	and 24 hr Rainfall	conducting Site Inspections	SWPPP with all conditions of the general permit	Corrected

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 RepresentativeName of Permittee or Duly Authorized RepresentativeDateDuly authorized representatives of the Permittee (Owner/Operator) must have written authorization, submitted to DEC, to sign any permit documents.Date

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity Permit Number GP-02-01

Quarterly Summary of SWPPP Status with Permit Compliance

Name of Permitted Facility:	Permit Identification #:	Today's I	Pate:
Location (Town and County):	Reporting Period:	Acres Disturbed:	Acres Stabilized:

Permit Reference; Part IV.D (page 18):

"The operator shall also prepare a written summary of its status with respect to compliance with this general permit at a minimum frequency of every three months during which coverage under this permit exists. The summary should address the status of achieving each component of the SWPPP. This summary shall be handled in the same manner as prescribed for SWPPPs under Part III, subsection B (see Page 9)."

Component of SWPPP (All SWM and E&SC Practices)	Compliant (Yes / No)	Comments on achieving each component of the SWPPP (Issues related to installation, maintenance, or use of practices)
Permanent EC Measures		EXAMPLE
Exposed Slope Stabilization:	Yes	As construction is completed in area 2, slopes have been stabilized with mulch and seed. Grass germination is at 60%. This work has been detailed in the regular inspection reports as to the extent and schedule of completion.

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."

__ of ___

APPENDIX H

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
 - d. Pre-Construction Site Assessment Checklist
- II. Construction Duration Inspections
 - a. Directions
 - b. Modification to the SWPPP
- III. Monthly Summary Reports
- IV. Monitoring, Reporting, and Three-Month Status Reportsa. 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	NG DOCUMENTS
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 professional¹ conduct an assessment of the site prior to the commencement of construction² 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 stabilization³ 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 pr	int):	
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 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 1 acre 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	Name of Inspector	Items of Concern
Inspection	based inspection	Traine of Inspector	

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.

New York State Department of Environmental Conservation Division of Water 625 Broadway, 4th Floor		
Albany, New York 12233-3505 NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity		
Please indicate your permit identification number: NY	R	
I. Owner or Operator Information		
1. Owner/Operator Name:		
2. Street Address:		
3. City/State/Zip:		
4. Contact Person:	4a.Telephone:	
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 accordan Date final stabilization completed (month/year):	ce with the general permit and SWPPP.	
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 GP-0-08-001)		
9c. □ Other (Explain on Page 2)		
IV. Final Site Information:		
10a. Did this construction activity require the development of a SWPI stormwater management practices? □ yes □ no (If no, go	PP that includes post-construction to question 10f.)	
10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? □ yes □ no (If no, explain on Page 2)		
10c. Identify the entity responsible for long-term operation and mainte	enance 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 deed restriction is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.
 - □ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, 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)

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

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

VI. Qualified Inspector Certification - Final Stabilization:		
I hereby certify that all disturbed areas have achieved final stabilization as defined in GP-0-08-001, 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:	
VII. 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:	Date:	
VIII. 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 - 4/10/08)