

# Stormwater Pollution Prevention Plan

411 Reynolds Road Glen Wind Energy Project

Borrego Solar

31 January 2022

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## Stormwater Pollution Prevention Plan Preparer's Certification

I certify under penalty of law that this document and all attachments/appendices 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 the 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 Penal Law.

Signature: Jaw Brillin

David M. Britton, P.E. NY License No. 075722 GHD Consulting Services Inc. Date: January 31, 2022

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#### 1. Purpose and Objectives

GHD Consulting Services, Inc. (GHD) has prepared this Stormwater Pollution Prevention Plan (SWPPP) on behalf of Borrego Solar for the Glen Wind Energy Project, a single 4.3 MW wind turbine, located at 411 Reynolds Road, Town of Glen, New York.

This SWPPP has been prepared in compliance with the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001), which is included in Appendix A. The design standards and practices outlined herein are based on guidelines in the New York State Standards and Specifications for Erosion and Sediment Control (NYS Standards) and the New York State Stormwater Management Design Manual.

The objective of the SWPPP is to establish mitigation measures and to minimize the number of pollutants in the stormwater runoff from the project area in order to protect the waters of the United States from the adverse impact of stormwater runoff. The selection of Best Management Practices (BMPs) for this project follows an approach to develop a Site design that regulates stormwater discharges, reduces impacts of stormwater runoff, and provides a maximum level of treatment given the project constraints.

An owner or operator of a construction activity that is eligible for coverage under this general permit must obtain coverage prior to commencement of construction activity. A copy of the Notice of Intent (NOI) can be found in Appendix B. The owner or operator shall submit electronically the NOI to the NYSDEC. Permit coverage shall begin five (5) business days following receipt of the NOI. The NYSDEC shall provide a Letter of Acknowledgment, and it shall be made part of this SWPPP in Appendix C.

The following sections outline the project background and existing Site conditions, the general project requirements, a description of construction activities, the erosion and sedimentation control requirements, post-construction stormwater practices, and maintenance and inspection requirements.

#### 2. Background

#### 2.1 Project Background

Borrego Solar has negotiated a lease agreement with a property owner on the east side of Reynolds Road, a Town roadway, in the Town of Glen, Montgomery County, for a single wind turbine project. All permitting of the Site is within the Glen jurisdiction. The standards and procedures for siting of wind projects is outlined in the Town of Glen Land Use Management Ordinance, which generally involved a Site plan review process to the Town Planning Board with issuance of a Special Use Permit (upon approval). The parcel is located within Montgomery County Agricultural District 3.

All project features will be leased, operated, and maintained by Borrego Solar. The project is located on private property and is not located within a regulated jurisdictional municipal separate storm system (MS4); therefore, SPDES permitting will be under the authority of the NYSDEC.

A location map of the Glen Reynolds Road Wind Energy Project is provided as Figure 1.

#### 2.2 Existing Conditions

The property of interest, 411 Reynolds Road, is a privately owned, single parcel of approximately 191 acres in size. Along the property, Reynolds Road travels southeast and turns to the southwest creating a roadway bend at the property. The Site is a vacant lot along Reynolds Road right-of-way but becomes heavily wooded towards the east and the higher elevations where the turbine is proposed. Several wetlands were delineated on the Site, as well as a stream, that were found to be federal jurisdictional. There is also a former farm road off Reynolds Road with an existing 10" culvert crossing at the junction between the start of the stream and the wetlands. The lease area of the Site is limited to the northeast portion of the project, which is also the location of the farm road.

Therefore, project impacts to wetlands have been minimized to the extent practical, but a disturbance of 0.25 acres is anticipated, and a joint application for permit is required.

The Site generally drains in three watersheds. The west side will drain towards Reynolds Road, where it splits to the north and south. In the center of the property, the grades will direct any runoff towards the stream and wetlands. Finally, to the far east, the site elevations peek and then drops dramatically to continue east.

The neighboring properties include some isolated rural residences, some farmlands (active and inactive), and some vacant, undisturbed parcels similar to the project parcel.

There is no floodplain on the property.

#### 2.3 Project Description

The project involves the construction of a single wind turbine and associated features and infrastructure. At the time of preparation of this SWPPP, the model anticipated for the project is the Vestas V150, 4.3 MW turbine, which has a tip height of 649 feet. The turbine foundation is anticipated to be a spread footer that will predominately be underground leaving an 18-foot concrete pedestal aboveground. Permanent features of the project shall include a gravel access road off Reynolds Road, a gravel pad around the turbine, a crane pad, and a small run of overhead electrical lines and poles off Reynolds Road, while the remaining electrical lines will be underground. Other temporary features needed during construction include construction staging area, stockpile, blade laydown area, and truck route around turbine. The staging area and truck route will be constructed of gravel, but following the turbine installation, the stone will be removed and the area de-compacted and restored with topsoil and seeding. The remaining areas will remain pervious but will require decompaction and reseeding following turbine construction.

There is no substation or other interconnection features required for the project. The project shall directly connect to the local electrical system.

The project will result in a soil disturbance of 4.26 acres of which 1.09 acres of new impervious area. Erosion and sediment control information is included on the Project Drawings, which are included as Appendix I of the SWPPP.

#### 2.4 Involved Parties

The following are the involved parties for the project concerning stormwater pollution prevention:

Operator: Borrego Solar

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Design Engineer: GHD Consulting Services, Inc.

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NYSDEC Regional Office: Region 7

Address: 615 Erie Boulevard West, Syracuse NY 13204

Phone Number: (315) 426-7400

#### 2.5 Geology

The soils in the United States are assigned to four Hydrologic Soils Groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

**HSG A**: Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

**HSG B**: Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well-drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

**HSG C**: Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

**HSG D**: Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a clay pan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils, which are in their natural condition in Group D, are assigned to dual classes.

The project site is mostly Arnot-Angola channery silt loams (AvB), with slopes from 3 percent to 8 percent, which is hydrologic group D and well drained with a deep water table. The turbine foundation will likely encounter bedrock. Other soil types are not present in significant portions of the site. The County Soil Reports are included in Appendix D.

#### 3. Stormwater Pollution Prevention Plan

#### 3.1 Construction Sequence

The project shall be constructed in a single phase of approximately 3 months. The following typical construction sequence will generally be followed:

- Mobilization of construction equipment and materials to the Site.
- Installation of temporary stabilized construction entrance to the Site.
- Contractor shall minimal clearing necessary to install silt fence/silt sock as shown on the Drawings, prior to completion of remaining site clearing.
- Establishment of staging area and concrete washout area.
- Maintenance of erosion and sediment controls shall be ongoing throughout construction.
- Rough grading of access road and replacement culvert crossing with larger pipe and riprap.
- Rough grading of turbine area and crane/laydown areas and stockpiling of materials as needed with perimeter protection.
- Installation of gravel access road, which will replace temporary construction entrance, temporary loop road and crane pad.
- Excavation and construction of turbine foundation and installation grounding and electrical service.
- Backfill of foundation.
- Delivery and assembly of crane and turbine components.
- Installation of poles and overhead electrical connection.
- Removal of temporary staging area and loop road.
- Fine grading and restoration and seeding of all disturbed areas.
- Removal of erosion and sediment control features upon minimum 80% establishment of grass cover and completion of plantings.

#### 3.2 Best Management Practices

As stated above, the project shall be constructed in a single phase of an approximate 3-month period. The project will not require the disturbance of greater than 5 acres at any one time. If at any time that changes, the Contractor must request, in writing, authorization from the Regional Office of the NYSDEC for the disturbance and meet all SPDES Permit requirements. Following authorization for greater than 5 acres of disturbance, when the disturbance drops below the 5-acre threshold, the Contractor must also notify the Regional Office in writing.

The Contractor will be responsible for dust control and removal of any sediment buildup on the adjacent roadway. The Contractor will be required to protect existing and new inlets and ditches throughout construction. All erosion and sediment control measures have been designed in general compliance with the NYS Standards.

The Contractor shall be responsible for installation and maintenance of BMPs on the Site. The Contractor shall sign the certification statements made part of the SWPPP in Appendix E. In addition, any subcontractors will be required to respect and protect these BMPs against disturbance due to their operations, therefore, will be required to sign the SWPPP as well.

The BMPs, which will be incorporated in the construction phase, are detailed on the Project Drawings (Appendix I) and include:

- Stabilized Construction Entrance: Reynolds Road is currently an asphalt Town roadway. Based on haul route analysis, the roadway may need to be improved and widened, as necessary, to accommodate construction vehicles and minimize sediment transportation off the Site. A stabilized construction entrance shall be installed at the Site entrance from the public roadway. The entrance shall help control sediment transportation by vehicles entering and exiting the Site. The entrance shall be installed in accordance with details and be maintained should sediment build up on the surface, as needed, and until the permanent gravel access road is installed.
- Silt Sock/Fence: As a measure to prevent off-Site sediment transportation to the drainage ditches and pond, silt sock or silt fence shall be installed along the slopes to prevent sediment-laden runoff from exiting the work areas, as shown on the Drawings. Sediment buildup on silt fence or silt sock shall be removed if it reaches 50% of the capacity and any damaged sections shall be replaced.
- Check Dams/Riprap: Stone check dams are intended to control potential sediment along swales and drainage ditches. The Contractor will be required to install stone check dams as shown on Drawings and as needed. The project will require the replacement of the culvert pipe at the start of the stream. The culvert pipe shall end sections and riprap as shown on the details to control erosion and sediment. These measures shall be inspected regularly and accumulated sediment removed from stones.
- Stockpile Stabilization: Spoil materials from excavation shall be stockpiled for reuse in wetland habitat plantings area or as backfill and excess spoils shall be removed from the Site. Topsoil material may be segregated from backfill and reused for stabilization. At no time shall stockpiled materials be placed in drainage pathways or waterways. The Contractor shall install perimeter protection around all stockpiles.
- Soil Stabilization: The project pervious surfaces around the turbine shall be lawn areas and will be stabilized using topsoil and seeding. Straw mulch may be used to stabilize the areas until grass growth is established. 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 14 days (7 days if greater than 5 acres disturbed) 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 standards, NYS Standards.

All temporary stormwater control measures shall remain in place, and well maintained, until a qualified professional determines that final stabilization has been reached.

#### 3.3 Pollution Prevention Controls

The Contractor and all subcontractors shall be responsible for implementation of pollution prevention controls. Pollution prevention controls shall include:

Dust Control: Contractors shall incorporate standard practices for the control of dust from construction. Such
controls shall include, but not be limited to, stabilized construction entrance, temporary stabilization of inactive

- areas and stockpiles, Site watering, and vehicle washing. The Contractor will be responsible for designating vehicle wash areas and providing proper facilities for such activities.
- Sanitary Facilities: Contractors shall comply with state and local sanitary regulations. Temporary sanitary facilities shall be provided at the Site throughout the construction phase. They must be utilized by all construction personnel and shall be serviced by a commercial operator.
- Waste Disposal and Construction Debris: All materials used on the Site will be properly stored, handled, and dispensed following applicable label directions. No solid waste materials are allowed to be exposed to or discharged from the Site with stormwater. Each Contractor and his subcontractors shall be responsible for proper containment and disposal of garbage and debris from construction activities. Contractors shall be responsible for coordinating garbage and debris removal or pickup if necessary.
- Concrete Truck Washout: If necessary, a designated truck washout area will be provided within the work area in order to ensure concrete materials are not impacted by stormwater.
- Vehicle Fueling: Temporary on-Site fuel tanks or trucks for construction vehicles shall meet all state and federal regulations and have approved spill containment. Emergency spill containment materials must also be kept on Site and accessible in case of spills.
- Spill Prevention and Control: All Contractors shall incorporate spill prevention planning, secondary containment, and spill cleanup procedures as required by OSHA and NYSDEC for all products present on the Site.
- Hazardous Materials: No hazardous materials are anticipated on the Site or as part of the project. If any hazardous or potentially hazardous waste is found at the Site, it will be properly handled in order to reduce the potential of stormwater impacts.

#### 3.4 Allowable Non-Stormwater Discharges

The following non-stormwater discharges are allowed as indicated in the SPDES Permit:

- Discharges from firefighting activities only when firefighting activities are emergencies/unplanned.
- Waters to which other components have not been added that are used to control dust.
- Uncontaminated discharges from construction dewatering operations.

#### 3.5 Post-Construction Stormwater Practices

The project was analyzed in accordance with the New York State Stormwater Design Manual (SWDM). All calculations were performed using the standard worksheets provided by the NYSDEC and are found in Appendix F. As required by the SWDM, Chapter 3, Stormwater Management Planning, there are six steps to developing a SWPPP.

- Step 1: Site Planning
- Step 2: Determine Water Quality Treatment Volume (WQv)
- Step 3: Apply Runoff Reduction Techniques (RRv)
- Step 4: Determine the minimum RRv required
- Step 5: Apply Standard Stormwater Management Practices
- Step 6: Apply Volume and Peak Rate Control Practices

The project design began with Step 1 and the following criteria was examined:

#### Preservation of Natural Resources

- a. Preservation of Undisturbed Areas The project is designed to limit disturbance of the property specifically the wetlands. The landowner also identified an exclusion area that no project features are permitted.
- b. Preservation of Buffers The project disturbance has been limited to the extent practical.
- c. Reduction of Clearing and Grading The project will limit clearing and grading as needed to level the necessary area for the turbine and access road.

- d. Locating Development in Less Sensitive Areas The project is located on a privately owned undisturbed parcel.
- e. Open Space Design This does not apply to the project.
- f. Soil Restoration All surfaces within the agricultural district shall be restored in accordance with New York State Department of Agriculture and Markets, Guidelines for Agricultural Mitigation for Wind Power Projects. All surfaces shall be decompacted and restored with topsoil and seed in accordance with Soil Restoration standard from the NYS Standards and Specifications for Erosion and Sediment Control, latest revision.

#### Reduction in Impervious Cover

- a. Roadway Reduction The access road will be installed to the minimum size needed for the installation and operation of a wind turbine.
- b. Sidewalk Reduction This does not apply to the project.
- c. Driveway Reduction This does not apply to the project.
- d. Cul-de-sac Reduction This does not apply to the project.
- e. Building Footprint Reduction This does not apply to the project. A single wind turbine has a fairly small footprint.
- f. Parking Reduction This does not apply to the project. No on-site parking is provided.

For Step 2, the Water Quality Volume (WQv) is calculated based on the formula is the SWDM, Chapter 4. For this project, the WQv required is 4,334 cf. Then under Step 3, runoff reduction techniques are considered, analyzed and applied as follows.

#### Runoff Reduction Techniques

- Conservation of Natural Areas The project will only impact areas as needed for project features.
- b. Sheet flow to Riparian Buffers or Filter Strips The project will utilize natural buffer areas and filter strips to provide stormwater treatment for the new impervious areas as shown below.
- c. Vegetated Swale No vegetated swale was incorporated into the project.
- d. Tree Planting/Tree Pit Tree planting is not feasible for a wind turbine project.
- e. Disconnection of Rooftop Runoff This does not apply to the project.
- f. Stream Daylighting The project will limit impact to the on-site stream to the location of an existing culvert.
- g. Rain Garden This practice is not recommended with the C or D soils.
- h. Green Roofs This does not apply to the project.
- i. Stormwater Planters This does apply to the project.
- j. Rain Barrels and Cisterns This does not apply to the project.
- k. Porous Pavement This does not apply to the project.

The following is an analysis of all runoff reduction techniques that supports the above determination for this project. Undisturbed natural areas, such as forested conservation areas and stream buffers or vegetated filter strips and riparian buffers, can be used to treat and control stormwater runoff from some areas of a development project. To meet requirements of sheetflow to riparian buffers or filter strips, the following analysis must be performed:

- a. The areas must be undisturbed and protected against soil compaction by heavy equipment.
- b. Maximum contributing lengths shall be 150 feet for pervious and 75 feet for impervious.
- c. Runoff shall enter as overland sheet flow or a flow spreader shall be supplied.
- d. Minimum width shall be 50 feet for slopes of 0% to 8%, 75 feet for 8% to 12%, and 100 feet for slopes 12% to 15%.
- e. For HSG D soils, the buffer length should be increased 20%.

The project will not only meet these criteria, but the length of filter strips and buffer areas shall be greater than required due to the size of adjacent undisturbed property within the site.

Once these techniques are applied to the project in accordance with Chapter 5.3, the areas are decreased and the WQv required becomes 1,448 cf.

Step 4 requires the calculation of the minimum Runoff Reduction Volume (RRv), which is the reduction of the total WQv by application of green infrastructure techniques. In accordance with the formula in Chapter 4.3, and due to the soil type D, the minimum RRv required is 752 cf. This will be met on the project by use of dry swales.

The WQv provided for the project is 3,870 cf and RRv provided equals 812 cf, which is greater than the required volumes. Therefore, Step 5 will not apply to the project as the above steps meet the WQv and RRv requirements.

Finally, Step 6, volume controls for the 1-year, 10-year, and 100-year storm events must be shown to have no impact post-development. This is presented in the SWDM as the Channel Protection Volume (CPv), the Overbank Flood Control Criteria (Qp), and the Extreme Flood Control Criteria (Qf). CPv requires the storage of the 1-year, 24-hour storm event while Qp and Qf are the pre and post-development 10-year and 10-year storm events respectively.

For analysis, the project site catchment area is divided into three watersheds, draining towards the northeast (NE), northwest (NW), and southwest (SW). The NE portion of the site is part of a 30-acre watershed, the NW portion of the site is part of a 39-acre watershed, and the SW portion of the site is part of a 30-acre watershed. Only NW and SW catchments land use are affected by the project as shown on Figure 2.

CPv is calculated as the 1-year, 24-year storm event volume. The required CPv is 6,970 cf (0.16 ac-ft). The dry swales provide 7,025 cf (0.16 ac-ft), so the project meets the requirement. The Qp and Qf peak flows are shown in the tables below.

A pre-construction and post-construction stormwater model were created. The results are shown in Appendix F and summarized in the tables below. The project will meet the requirements of the SWDM and SPDES permit.

Table 1 Pre-Development 1-year, 24-hour event

| Catchment<br>Area | Area<br>(ac) | Pre-Development<br>Runoff (in) | Pre-Development<br>Runoff (ac-ft) |  |
|-------------------|--------------|--------------------------------|-----------------------------------|--|
| Alea              | (uc)         | 1 yr                           | 1 yr                              |  |
| SW                | 20.99        | 0.86                           | 1.50                              |  |
| NW                | 38.97        | 0.76                           | 2.46                              |  |
| NE                | 30.05        | 0.76                           | 1.89                              |  |

Table 2 Pre-Development 1-year, 24-hour event

| Catchment<br>Area | Area<br>(ac) | Post-Development<br>Runoff (in) | Post-Development<br>Runoff (ac-ft) |  |
|-------------------|--------------|---------------------------------|------------------------------------|--|
| Alea (ac)         |              | 1 yr                            | 1 yr                               |  |
| SW                | 20.99        | 0.86                            | 1.50                               |  |
| NW                | 38.97        | 0.81                            | 2.62                               |  |
| NE                | 30.05        | 0.76                            | 1.89                               |  |

Table 3 Pre-Development Peak Flow

| Pre-Development Peak Flows (cfs) |    |       |       |        |  |
|----------------------------------|----|-------|-------|--------|--|
| Watershed                        | CN | 1 yr  | 10 yr | 100 yr |  |
| SW                               | 84 | 19.56 | 49.73 | 106.87 |  |
| NW                               | 82 | 26.54 | 64.71 | 136.18 |  |
| NE                               | 82 | 33.29 | 79.21 | 163.97 |  |

Table 4 Post-Development Peak Flow

| Post-Development Peak Flows (cfs) |    |       |       |        |  |
|-----------------------------------|----|-------|-------|--------|--|
| Watershed                         | CN | 1 yr  | 10 yr | 100 yr |  |
| SW                                | 84 | 19.56 | 49.73 | 106.87 |  |
| NW                                | 82 | 26.35 | 64.39 | 135.25 |  |
| NE                                | 82 | 33.29 | 9.21  | 163.97 |  |

Table 5 Percent Increase in Peak Flow

| Percentage Increase        |       |       |       |  |  |
|----------------------------|-------|-------|-------|--|--|
| Watershed 1 yr 10 yr 100 y |       |       |       |  |  |
| SW                         | 0.0%  | 0.0%  | 0.0%  |  |  |
| NW                         | -0.7% | -0.5% | -0.7% |  |  |
| NE                         | 0.0%  | 0.0%  | 0.0%  |  |  |
| Averaged                   | -0.2% | -0.2% | -0.2% |  |  |

#### 3.6 Maintenance

The Contractor is responsible for the condition and maintenance of the Site during construction. This shall include the maintenance of all erosion and sediment controls and pollution prevention measures during construction. The Contractor and their subcontractors shall sign the certification statement as referenced in Appendix E. Maintenance guidelines for each practice shall be in accordance with NYS Standards and as follows.

As discussed in Section 3.2 and the NYS Standards, the silt fence and silt sock must be checked for any damaged or bulges and replaced as necessary. In addition, sediment shall be removed from area adjacent to perimeter protections when it reaches half the capacity. Stone check dams shall be inspected for condition of the stone and sediment accumulation. Additional stone shall be added if needed and any significant sediment or vegetation growth shall be removed if it is affecting the performance of the dams. The stabilized construction entrance must be kept in working condition. If sediment tracking is occurring off the site, the stone shall be cleaned or replaced as needed.

Section 3.3 outlines the pollution prevention measures for construction. If the site construction utilizes a concrete washout area, the area will be checked regularly as part of weekly inspections. As necessary, the area will be cleaned out and concrete materials sent to an appropriate facility for disposal. The site staging area shall also be inspected to ensure all materials and facilities are properly stored and kept in good condition.

Each Contractor and subcontractor shall identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor, as defined in the SPDES permit. The trained contractor shall conduct daily inspection of the Site including all BMPs and erosion and sediment controls and perform any maintenance required.

The long-term maintenance of the Site, and all features, is the responsibility of Borrego as the operator of the wind turbine. It is anticipated that a Borrego representative will make periodic inspections of the Site and the project facilities. At that time, the gravel access road will be inspected for any issues, the filter strips area will be inspected for loss of vegetation, and the culvert and riprap shall be inspected and cleaned as needed.

#### 4. Inspection

In accordance with the SPDES permit for stormwater discharges from construction activities, the owner or operator of the Site must ensure that all erosion and sediment control practices, and all post-construction stormwater management practices identified in the SWPPP are maintained in effective operating condition at all times. Borrego, as owner/operator, shall engage a qualified inspector, as required, in the following sections. The Contractor shall engage a trained contractor as defined by the permit throughout construction. The trained contractor shall be responsible for the day-to-day implementation of the SWPPP.

The following sections contain additional information taken directly from the SPDES permit.

### 4.1 Owner or Operator Maintenance Inspection Requirements

The *owner or operator* shall inspect, in accordance with the requirements in the most current version of the technical standard, NYS Standards, the erosion and sediment control measures identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.

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

For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

#### 4.2 Qualified Inspector Requirements

The *owner or operator* shall have a *qualified inspector* conduct Site inspections in conformance with the following requirements:

Note: The *trained contractor* identified cannot conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications in the permit. In order to perform these inspections, the *trained contractor* would have to be one of the following:

- Licensed Professional Engineer.
- Certified Professional in Erosion and Sediment Control (CPESC).
- Registered Landscape Architect.
- Someone working under the direct supervision of, and at the same company as, the licensed Professional
  Engineer or Registered Landscape Architect, provided they have received 4 hours of Department-endorsed
  training in proper erosion and sediment control principles from a Soil and Water Conservation District or other
  Department-endorsed entity.

Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

- For construction sites where soil disturbance activities are ongoing, the qualified inspector shall conduct a site inspection at least once every 7 calendar days.
- For construction sites where soil disturbance activities are ongoing and the owner or operator has received authorization to disturb greater than 5 acres of soil at any one time, the qualified inspector shall conduct at least two site inspections every 7 calendar days. The two inspections shall be separated by a minimum of 2 full calendar days.
- 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 30 calendar days. The owner or operator shall notify the Regional Office stormwater contact, in writing, prior to reducing the frequency of inspections.
- 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 Region 9 stormwater contact person in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector perform a final inspection and certify that all disturbed areas have achieved

final stabilization, and all temporary, structural erosion, and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the Notice of Termination (NOT). The owner or operator shall then submit the completed NOT form to the NYS DEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, NY 12233-3505.

At a minimum, the qualified inspector shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved final stabilization, all points of discharge to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction Site, and all points of discharge from the construction Site.

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:

- Date and time of inspection.
- Name and title of person(s) performing inspection.
- A description of the weather and soil conditions (e.g., dry, wet, saturated) at the time of the inspection.
- 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.
- A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the
  property boundaries of the construction Site, which receive runoff from disturbed areas. This shall include
  identification of any discharges of sediment to the surface waterbody.
- Identification of all erosion and sediment control practices that need repair or maintenance.
- 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.
- 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.
- 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.
- 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).
- Digital photographs with date stamp that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained on Site within 7 calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within 7 calendar days of that inspection.

Within 1 business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor or subcontractor of any corrective actions that need to be taken. The Contractor or subcontractor shall begin implementing the corrective actions within 1 business day of this notification and shall complete the corrective actions in a reasonable timeframe.

All inspection reports shall be signed by the qualified inspector. Pursuant to the permit, the inspection reports shall be maintained on Site with the SWPPP.

A blank example of a weekly inspection report has been included in Appendix G. The NYSDEC shall have the authority to inspect the Site and required documentation at any time during normal business hours.

#### 5. Project Certification and Closeout

Borrego, as the Site operator, and the Contractor shall sign the SWPPP certifications in Appendix E.

Borrego shall submit the NOI to the NYSDEC in order to obtain permit coverage. This will be in the form of a NYSDEC Acknowledgment Letter and made part of the SWPPP in Appendix C. Timelines for submittal of NOI are provided in the SPDES permit.

Upon establishment of final cover, a final inspection shall be conducted by the qualified inspector who will sign off on the final stabilization and post-construction stormwater management practices of the Site on the NOT, which is included in Appendix H. Then, Borrego shall sign and submit the NOT to the NYSDEC for closure of the SPDES permit.

#### 6. Recordkeeping

**During Construction:** The Contractor shall maintain for the duration of construction and in a secure location on Site, copies of the signed SWPPP, the NOI, the SPDES General Permit, and NYSDEC Acknowledgment Letter. Copies of inspection reports shall be made a part of the SWPPP. These reports shall be kept on Site during construction and be made available to the NYSDEC during inspection. During normal working hours, the documents shall be available for viewing.

**Record Retention:** The *owner or operator* shall retain a copy of the NOI, MS4 SWPPP Acceptance Form, NYSDEC Acknowledgment Letter, SWPPP, and any inspection reports that were prepared in conjunction with this permit for a period of at least 5 years from the date that the Site achieves final stabilization. This period may be extended by the NYSDEC, in its sole discretion, at any time upon written notification.

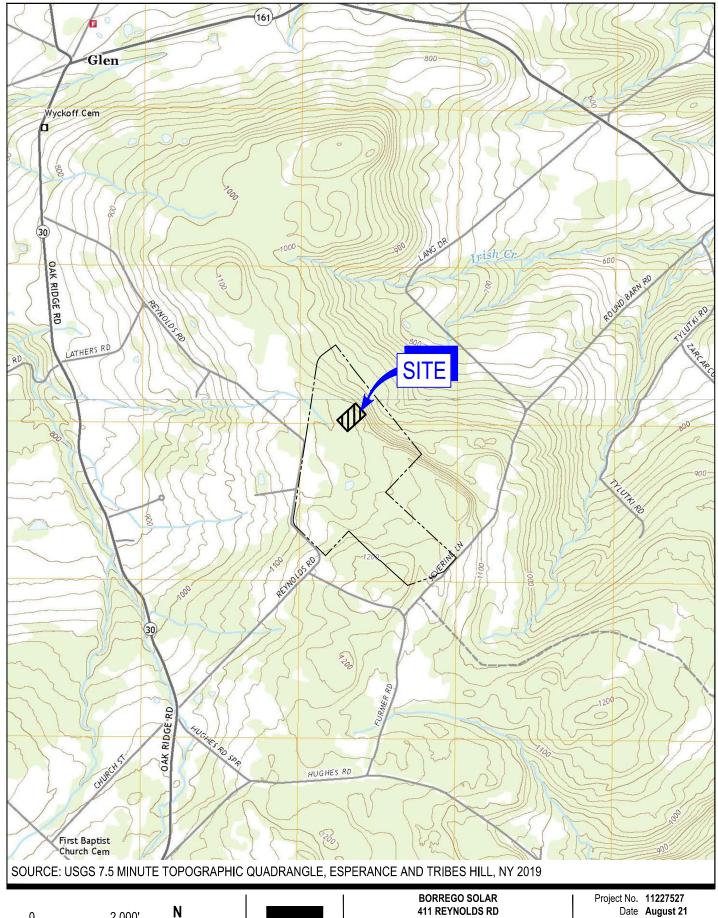
**Addresses:** With the exception of the NOI and NOT, all written correspondence requested by the NYSDEC, including individual permit applications, shall be sent to the address of the Region 4 Office, Bureau of Water Permits.

#### 7. References

- New York State Standards and Specifications for Erosion and Sediment Control (November 2016).
- New York State Stormwater Management Design Manual (January 2015).

# Figure 1

**Location Map** 





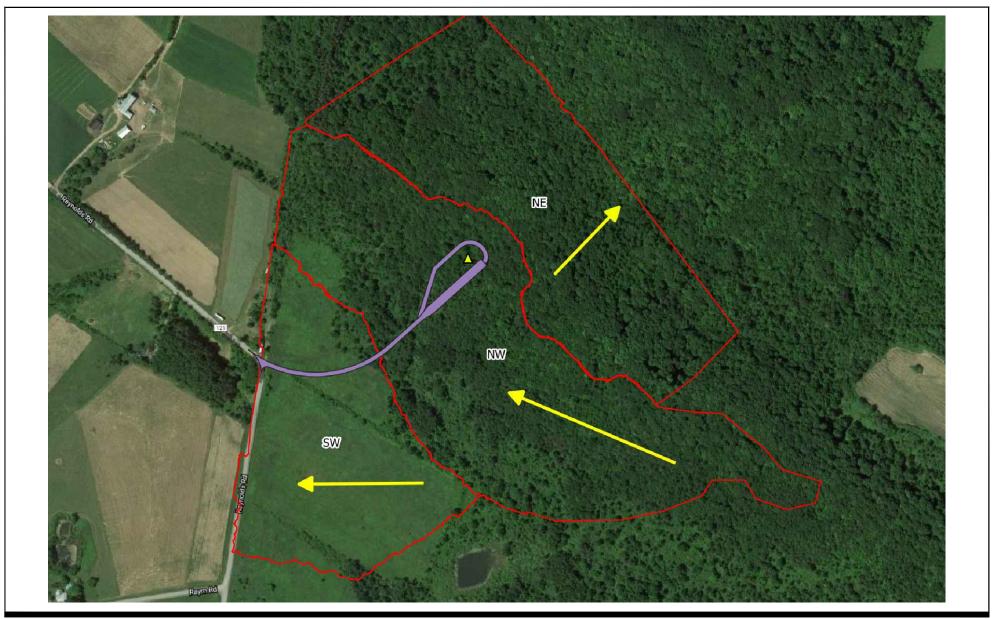




SITE LOCATION MAP

FIGURE 1

# Figure 2 NW and SW Catchments Land Use







BORREGO SOLAR 411 REYNOLDS RD Project No. 11227527
Date January 22

**DRAINAGE AREAS** 

FIGURE 2

## Appendix A

SPDES General Permit for Stormwater Discharges from Construction Activities GP-0-20-001



#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

#### SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

From

#### **CONSTRUCTION ACTIVITY**

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson

**Chief Permit Administrator** 

Authorized Signature

Date

Address:

**NYS DEC** 

**Division of Environmental Permits** 

625 Broadway, 4th Floor Albany, N.Y. 12233-1750

#### **PREFACE**

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System* ("NPDES") permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An owner or operator of a construction activity that is eligible for coverage under this permit must obtain coverage prior to the commencement of construction activity. Activities that fit the definition of "construction activity", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to ECL section 17-0505 and 17-0701, the owner or operator must have coverage under a SPDES permit prior to commencing construction activity. The owner or operator cannot wait until there is an actual discharge from the construction site to obtain permit coverage.

\*Note: The italicized words/phrases within this permit are defined in Appendix A.

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

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#### Part 1. PERMIT COVERAGE AND LIMITATIONS

#### A. Permit Application

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

- Construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
- Construction activities involving soil disturbances of less than one (1) acre
  where the Department has determined that a SPDES permit is required for
  stormwater discharges based on the potential for contribution to a violation of a
  water quality standard or for significant contribution of pollutants to surface
  waters of the State.
- 3. Construction activities located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

#### B. Effluent Limitations Applicable to Discharges from Construction Activities

Discharges authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) - (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* ("SWPPP") the reason(s) for the

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

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

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

- c. **Dewatering**. *Discharges* from *dewatering* activities, including *discharges* from *dewatering* of trenches and excavations, must be managed by appropriate control measures.
- d. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of pollutants and prevent a violation of the water quality standards. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used:
  - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
  - (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. **Prohibited** *Discharges*. The following *discharges* are prohibited:
  - (i) Wastewater from washout of concrete;
  - (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
- (iv) Soaps or solvents used in vehicle and equipment washing; and
- (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

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

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

#### a. Sizing Criteria for New Development

- (i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

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

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

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

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

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

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

#### c. Sizing Criteria for Redevelopment Activity

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

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

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

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

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

#### D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control discharges necessary to meet applicable water quality standards. It shall be a violation of the ECL for any discharge to either cause or contribute to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

- 1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
- 2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
- 3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

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

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

#### E. Eligibility Under This General Permit

- 1. This permit may authorize all *discharges* of stormwater from *construction* activity to surface waters of the State and groundwaters except for ineligible discharges identified under subparagraph F. of this Part.
- 2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges*; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.
- 3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated discharges from construction site de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the owner or operator must still comply with water quality standards in Part I.D of this permit.
- 4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

#### F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

- 1. *Discharge*s 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 E.3. of this Part and identified in the SWPPP required by this permit;
- 3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
- 4. Construction activities or discharges from construction activities that may adversely affect an endangered or threatened species unless the owner or

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

- 5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
- 6. Construction activities for residential, commercial and institutional projects:
  - a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing impervious cover, and
  - c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.
- 7. Construction activities for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s: and
  - b. Which are undertaken on land with no existing *impervious cover*, and
  - c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

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

- (i) No Affect
- (ii) No Adverse Affect
- (iii) Executed Memorandum of Agreement, or

#### d. Documentation that:

- (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.
- 9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

#### Part II. PERMIT COVERAGE

## A. How to Obtain Coverage

- An owner or operator of a construction activity that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.
- 2. An owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department. The owner or operator shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.
- 3. The requirement for an owner or operator to have its SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department does not apply to an owner or operator that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of Owner or Operator) or where the owner or operator of the construction activity is the regulated, traditional land use control MS4. This exemption does not apply to construction activities subject to the New York City Administrative Code.

## B. Notice of Intent (NOI) Submittal

 Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

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

- 2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.
- 3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
- 4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

#### C. Permit Authorization

- 1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
- 2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
  - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,
  - b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

- c. the final SWPPP has been prepared, and
- d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
- 3. An *owner or operator* that has satisfied the requirements of Part II.C.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 electronic version of the NOI (eNOI) for construction activities with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, for construction activities that require post-construction stormwater management practices pursuant to Part III.C.; or
    - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
    - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for construction activities with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, for construction activities that require post-construction stormwater management practices pursuant to Part III.C.

- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
  - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "MS4 SWPPP Acceptance" form, or
  - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.
- 4. Coverage under this permit authorizes stormwater discharges from only those areas of disturbance that are identified in the NOI. If an owner or operator wishes to have stormwater discharges from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The owner or operator shall not commence construction activity on the future or additional areas until their authorization to discharge under this permit goes into effect in accordance with Part II.C. of this permit.

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

- The owner or operator shall ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
- 2. The owner or operator shall maintain a copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved final stabilization and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
- 3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated*, *traditional land*

use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity). At a minimum, the owner or operator must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

- a. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
- c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
- d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.
- e. The *owner or operator* shall include the requirements above in their SWPPP.
- 4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..
- 5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
- 6. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4, the owner or operator shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the regulated, traditional land use control MS4, the owner or operator shall have the SWPPP amendments or modifications reviewed and accepted by the regulated, traditional land use control MS4 prior to commencing construction of the post-construction stormwater management practice.

# E. Permit Coverage for Discharges Authorized Under GP-0-15-002

 Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002), an owner or operator of a construction activity with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to discharge in accordance with GP- 0-20-001, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

## F. Change of Owner or Operator

- 1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4*, the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.
- 2. Once the new owner or operator obtains permit coverage, the original owner or operator shall then submit a completed NOT with the name and permit identification number of the new owner or operator to the Department at the address in Part II.B.1. of this permit. If the original owner or operator maintains ownership of a portion of the construction activity and will disturb soil, they must maintain their coverage under the permit.
- 3. 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. A SWPPP shall be prepared and implemented by the owner or operator of each construction activity covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the commencement of construction activity. A copy of the completed, final NOI shall be included in the SWPPP.
- 2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
- 3. All SWPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
- 4. The owner or operator must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the owner or operator shall amend the SWPPP, including construction drawings:
  - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

- b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants;
- c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and
- d. to document the final construction conditions.
- 5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.
- 6. Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed.

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

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

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

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

- 1. Erosion and sediment control component All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
  - a. Background information about the scope of the project, including the location, type and size of project

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the construction activity; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, 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. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the stormwater discharges;
- k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site, including, but not limited to, stormwater discharges from asphalt plants and concrete plants located on the construction site; and
- I. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standard.
- 2. Post-construction stormwater management practice component The owner or operator of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable sizing criteria in Part I.C.2.a., c. or d. of this permit and the performance criteria in the technical standard, New York State Stormwater Management Design Manual dated January 2015

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

The post-construction stormwater management practice component of the SWPPP shall include the following:

 a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

- A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
  - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

# C. Required SWPPP Components by Project Type

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

#### Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

# A. General Construction Site Inspection and Maintenance Requirements

- 1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
- 2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

## **B. Contractor Maintenance Inspection Requirements**

1. The owner or operator of each construction activity identified in Tables 1 and 2 of Appendix B shall have a trained contractor inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

- 2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the trained contractor can stop conducting the maintenance inspections. The trained contractor shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
- 3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

## C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
- 1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, <u>with the exception of</u>:
  - a. the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not 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;
- the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;
- c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
- d. construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
- 2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
  - a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
  - b. For construction sites where soil disturbance activities are on-going and the owner or operator has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days. The owner or operator shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to reducing the frequency of inspections.

- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector perform a final inspection and certify that all disturbed areas have achieved *final* stabilization, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction" Stormwater Management Practice" certification statements on the NOT. The owner or operator shall then submit the completed NOT form to the address in Part II.B.1 of this permit.
- e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- 3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.
- 4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

- a. Date and time of inspection;
- b. Name and title of person(s) performing inspection;
- c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
- d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
- e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface waterbody;
- f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
- g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
- Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;
- Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the postconstruction stormwater management practice(s);
- Identification and status of all corrective actions that were required by previous inspection; and

- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
- 5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
- 6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

#### Part V. TERMINATION OF PERMIT COVERAGE

## A. Termination of Permit Coverage

- An owner or operator that is eligible to terminate coverage under this permit
  must submit a completed NOT form to the address in Part II.B.1 of this permit.
  The NOT form shall be one which is associated with this permit, signed in
  accordance with Part VII.H of this permit.
- 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 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.F. of this permit.
- d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
- 3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
- 4. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4 and meet subdivision 2a. or 2b. of this Part, the owner or operator shall have the regulated, traditional land use control MS4 sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The regulated, traditional land use control MS4 official, by signing this statement, has determined that it is acceptable for the owner or operator to submit the NOT in accordance with the requirements of this Part. The regulated, traditional land use control MS4 can make this determination by performing a final site inspection themselves or by accepting the qualified inspector's final site inspection certification(s) required in Part V.A.3. of this permit.
- 5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
  - a. the post-construction stormwater management practice(s) and any right-ofway(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator*'s deed of record,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

#### Part VI. REPORTING AND RETENTION RECORDS

#### A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

### **B.** Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

#### Part VII. STANDARD PERMIT CONDITIONS

#### A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

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

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

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

## C. Enforcement

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

#### D. Need to Halt or Reduce Activity Not a Defense

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

## E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

## F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

#### G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

#### H. Signatory Requirements

- 1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  - (i) the chief executive officer of the agency, or
  - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- 2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
- 3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
- 4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

# I. Property Rights

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

## J. Severability

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

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

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

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

## L. Proper Operation and Maintenance

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

## M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- 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

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

#### N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

#### O. Definitions

Definitions of key terms are included in Appendix A of this permit.

# P. Re-Opener Clause

- 1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
- Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

## Q. Penalties for Falsification of Forms and Reports

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

# **R.** Other Permits

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

## **APPENDIX A – Acronyms and Definitions**

## **Acronyms**

APO – Agency Preservation Officer

BMP - Best Management Practice

CPESC - Certified Professional in Erosion and Sediment Control

Cpv – Channel Protection Volume

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

DOW - Division of Water

EAF – Environmental Assessment Form

ECL - Environmental Conservation Law

EPA – U. S. Environmental Protection Agency

HSG – Hydrologic Soil Group

MS4 – Municipal Separate Storm Sewer System

NOI – Notice of Intent

NOT – Notice of Termination

NPDES - National Pollutant Discharge Elimination System

OPRHP – Office of Parks, Recreation and Historic Places

Qf – Extreme Flood

Qp - Overbank Flood

RRv - Runoff Reduction Volume

RWE - Regional Water Engineer

SEQR - State Environmental Quality Review

SEQRA - State Environmental Quality Review Act

SHPA – State Historic Preservation Act

SPDES – State Pollutant Discharge Elimination System

SWPPP – Stormwater Pollution Prevention Plan

TMDL - Total Maximum Daily Load

UPA – Uniform Procedures Act

USDA - United States Department of Agriculture

WQv - Water Quality Volume

#### **Definitions**

All definitions in this section are solely for the purposes of this permit.

**Agricultural Building** – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

**Agricultural Property** –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

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.

**Construction Site** – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities*" and "*Larger Common Plan of Development or Sale*" also.

**Dewatering** – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

**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*.

**Embankment** –means an earthen or rock slope that supports a road/highway.

**Endangered or Threatened Species** – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

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

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

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

**General SPDES permit** - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

**Groundwater(s)** - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

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

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

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

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

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

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

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

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

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

**Natural Buffer** –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

**New Development** – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

**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*.

**Nonpoint Source** - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

**Overbank** –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

**Owner or Operator** - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

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

**Point Source** - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

**Pollutant** - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq.

**Qualified Inspector** - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

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

**Regulated, Traditional Land Use Control MS4 -** means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

**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,
- 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 stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material.
- Long-term use of equipment storage areas at or near highway maintenance facilities.
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

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

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

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

**Steep Slope** – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

**Streambank** – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

**Stormwater Pollution Prevention Plan (SWPPP)** – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

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

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

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

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

**Trained Contractor -** means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

**Uniform Procedures Act (UPA) Permit** - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

**Water Quality Standard** - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

# **APPENDIX B – Required SWPPP Components by Project Type**

# Table 1 Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E</u>
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

- 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
- · Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- · Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- · Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

# Table 1 (Continued) Construction Activities that Require the Preparation of a SWPPP

### THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

- · Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that alter hydrology from pre to post development conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious* area and do not alter hydrology from pre to post development conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

### Table 2

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

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- · Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- · Amusement parks
- · Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or alter the hydrology from pre to post development conditions
- · Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- · Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- · Playgrounds that include the construction or reconstruction of impervious area
- · Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

# **Table 2 (Continued)**

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

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or alter the hydrology from pre to post development conditions, and are not listed in Table 1

# **APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal**

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

- Entire New York City Watershed located east of the Hudson River Figure 1
- Onondaga Lake Watershed Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed Figure 4
- Kinderhook Lake Watershed Figure 5

Figure 1 - New York City Watershed East of the Hudson

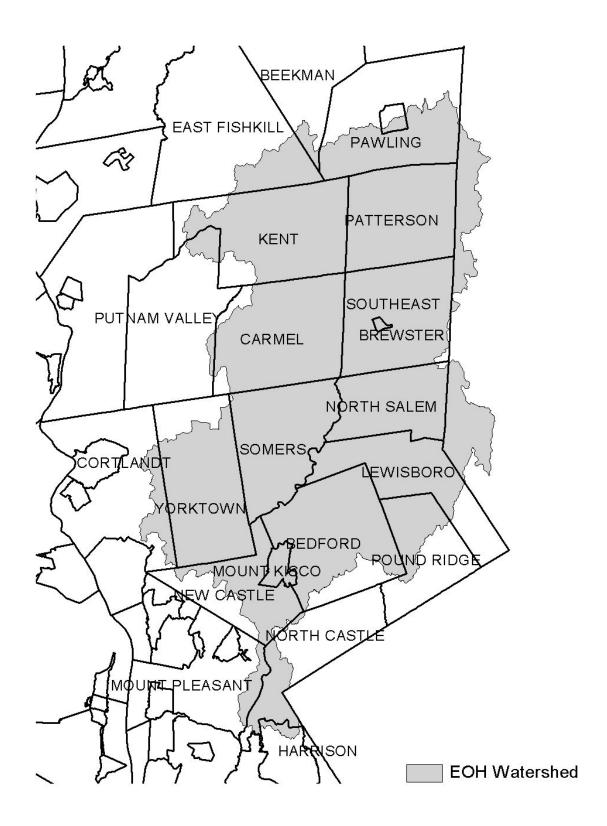


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

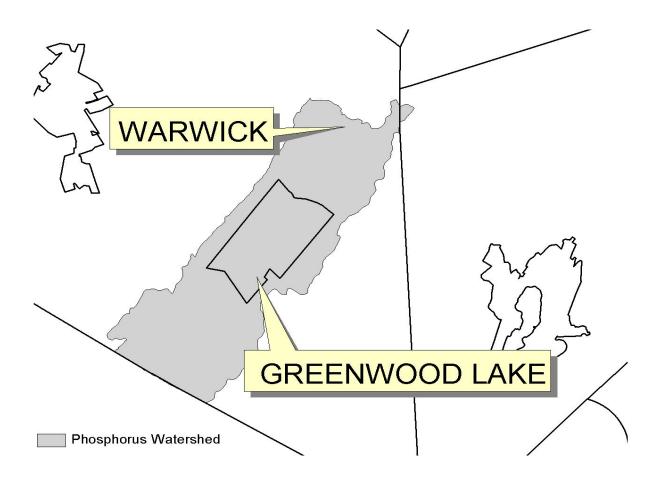


Figure 4 - Oscawana Lake Watershed

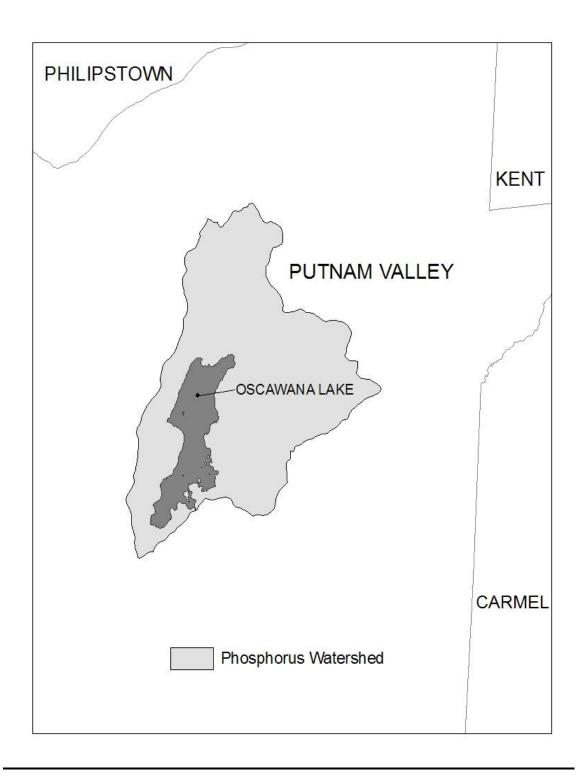
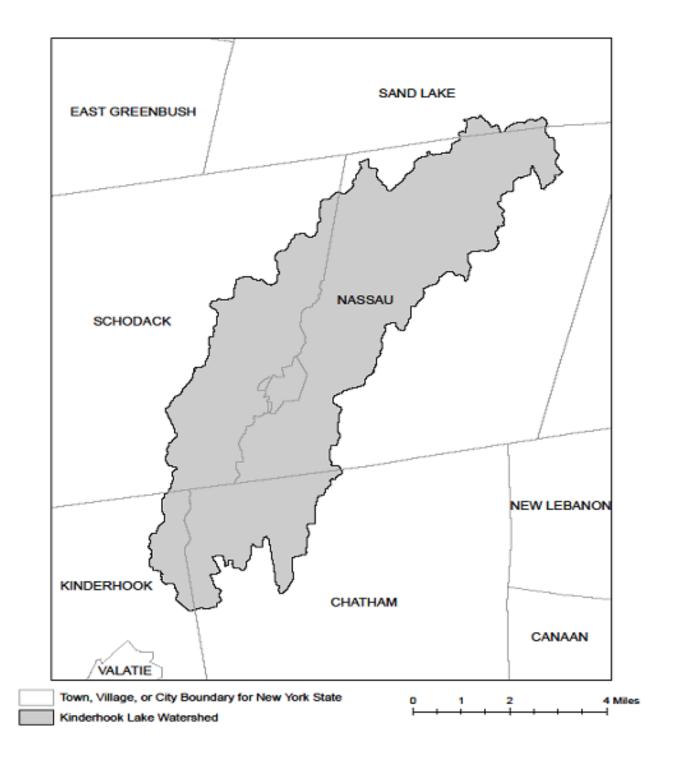


Figure 5 - Kinderhook Lake Watershed



# APPENDIX D - Watersheds with Lower Disturbance Threshold

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 – 303(d) Segments Impaired by Construction Related Pollutant(s)**

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

| COUNTY      | WATERBODY                                | POLLUTANT     |
|-------------|--|---------------|
| Albany      | Ann Lee (Shakers) Pond, Stump Pond       | Nutrients     |
| Albany      | Basic Creek Reservoir                    | Nutrients     |
| Allegany    | Amity Lake, Saunders Pond                | Nutrients     |
| Bronx       | Long Island Sound, Bronx                 | Nutrients     |
| Bronx       | Van Cortlandt Lake                       | Nutrients     |
| Broome      | Fly Pond, Deer Lake, Sky Lake            | Nutrients     |
| Broome      | Minor Tribs to Lower Susquehanna (north) | Nutrients     |
| Broome      | Whitney Point Lake/Reservoir             | Nutrients     |
| Cattaraugus | Allegheny River/Reservoir                | Nutrients     |
| Cattaraugus | Beaver (Alma) Lake                       | Nutrients     |
| Cattaraugus | Case Lake                                | Nutrients     |
| Cattaraugus | Linlyco/Club Pond                        | Nutrients     |
| Cayuga      | Duck Lake                                | Nutrients     |
| Cayuga      | Little Sodus Bay                         | Nutrients     |
| Chautauqua  | Bear Lake                                | Nutrients     |
| Chautauqua  | Chadakoin River and tribs                | Nutrients     |
| Chautauqua  | Chautauqua Lake, North                   | Nutrients     |
| Chautauqua  | Chautauqua Lake, South                   | Nutrients     |
| Chautauqua  | Findley Lake                             | Nutrients     |
| Chautauqua  | Hulburt/Clymer Pond                      | Nutrients     |
| Clinton     | Great Chazy River, Lower, Main Stem      | Silt/Sediment |
| Clinton     | Lake Champlain, Main Lake, Middle        | Nutrients     |
| Clinton     | Lake Champlain, Main Lake, North         | Nutrients     |
| Columbia    | Kinderhook Lake                          | Nutrients     |
| Columbia    | Robinson Pond                            | Nutrients     |
| Cortland    | Dean Pond                                | Nutrients     |

| Dutchess   | Fall Kill and tribs                     | Nutrients     |
|------------|---|---------------|
| Dutchess   | Hillside Lake                           | Nutrients     |
| Dutchess   | Wappingers Lake                         | Nutrients     |
| Dutchess   | Wappingers Lake                         | Silt/Sediment |
| Erie       | Beeman Creek and tribs                  | Nutrients     |
| Erie       | Ellicott Creek, Lower, and tribs        | Silt/Sediment |
| Erie       | Ellicott Creek, Lower, and tribs        | Nutrients     |
| Erie       | Green Lake                              | Nutrients     |
| Erie       | Little Sister Creek, Lower, and tribs   | Nutrients     |
| Erie       | Murder Creek, Lower, and tribs          | Nutrients     |
| Erie       | Rush Creek and tribs                    | Nutrients     |
| Erie       | Scajaquada Creek, Lower, and tribs      | Nutrients     |
| Erie       | Scajaquada Creek, Middle, and tribs     | Nutrients     |
| Erie       | Scajaquada Creek, Upper, and tribs      | Nutrients     |
| Erie       | South Branch Smoke Cr, Lower, and tribs | Silt/Sediment |
| Erie       | South Branch Smoke Cr, Lower, and tribs | Nutrients     |
| Essex      | Lake Champlain, Main Lake, South        | Nutrients     |
| Essex      | Lake Champlain, South Lake              | Nutrients     |
| Essex      | Willsboro Bay                           | Nutrients     |
| Genesee    | Bigelow Creek and tribs                 | Nutrients     |
| Genesee    | Black Creek, Middle, and minor tribs    | Nutrients     |
| Genesee    | Black Creek, Upper, and minor tribs     | Nutrients     |
| Genesee    | Bowen Brook and tribs                   | Nutrients     |
| Genesee    | LeRoy Reservoir                         | Nutrients     |
| Genesee    | Oak Orchard Cr, Upper, and tribs        | Nutrients     |
| Genesee    | Tonawanda Creek, Middle, Main Stem      | Nutrients     |
| Greene     | Schoharie Reservoir                     | Silt/Sediment |
| Greene     | Sleepy Hollow Lake                      | Silt/Sediment |
| Herkimer   | Steele Creek tribs                      | Silt/Sediment |
| Herkimer   | Steele Creek tribs                      | Nutrients     |
| Jefferson  | Moon Lake                               | Nutrients     |
| Kings      | Hendrix Creek                           | Nutrients     |
| Kings      | Prospect Park Lake                      | Nutrients     |
| Lewis      | Mill Creek/South Branch, and tribs      | Nutrients     |
| Livingston | Christie Creek and tribs                | Nutrients     |
| Livingston | Conesus Lake                            | Nutrients     |
| Livingston | Mill Creek and minor tribs              | Silt/Sediment |
| Monroe     | Black Creek, Lower, and minor tribs     | Nutrients     |
| Monroe     | Buck Pond                               | Nutrients     |
| Monroe     | Cranberry Pond                          | Nutrients     |

| Monroe   | Lake Ontario Shoreline, Western          | Nutrients     |
|----------|--|---------------|
| Monroe   | Long Pond                                | Nutrients     |
| Monroe   | Mill Creek and tribs                     | Nutrients     |
| Monroe   | Mill Creek/Blue Pond Outlet and tribs    | Nutrients     |
| Monroe   | Minor Tribs to Irondequoit Bay           | Nutrients     |
| Monroe   | Rochester Embayment - East               | Nutrients     |
| Monroe   | Rochester Embayment - West               | Nutrients     |
| Monroe   | Shipbuilders Creek and tribs             | Nutrients     |
| Monroe   | Thomas Creek/White Brook and tribs       | Nutrients     |
| Nassau   | Beaver Lake                              | Nutrients     |
| Nassau   | Camaans Pond                             | Nutrients     |
| Nassau   | East Meadow Brook, Upper, and tribs      | Silt/Sediment |
| Nassau   | East Rockaway Channel                    | Nutrients     |
| Nassau   | Grant Park Pond                          | Nutrients     |
| Nassau   | Hempstead Bay                            | Nutrients     |
| Nassau   | Hempstead Lake                           | Nutrients     |
| Nassau   | Hewlett Bay                              | Nutrients     |
| Nassau   | Hog Island Channel                       | Nutrients     |
| Nassau   | Long Island Sound, Nassau County Waters  | Nutrients     |
| Nassau   | Massapequa Creek and tribs               | Nutrients     |
| Nassau   | Milburn/Parsonage Creeks, Upp, and tribs | Nutrients     |
| Nassau   | Reynolds Channel, west                   | Nutrients     |
| Nassau   | Tidal Tribs to Hempstead Bay             | Nutrients     |
| Nassau   | Tribs (fresh) to East Bay                | Nutrients     |
| Nassau   | Tribs (fresh) to East Bay                | Silt/Sediment |
| Nassau   | Tribs to Smith/Halls Ponds               | Nutrients     |
| Nassau   | Woodmere Channel                         | Nutrients     |
| New York | Harlem Meer                              | Nutrients     |
| New York | The Lake in Central Park                 | Nutrients     |
| Niagara  | Bergholtz Creek and tribs                | Nutrients     |
| Niagara  | Hyde Park Lake                           | Nutrients     |
| Niagara  | Lake Ontario Shoreline, Western          | Nutrients     |
| Niagara  | Lake Ontario Shoreline, Western          | Nutrients     |
| Oneida   | Ballou, Nail Creeks and tribs            | Nutrients     |
| Onondaga | Harbor Brook, Lower, and tribs           | Nutrients     |
| Onondaga | Ley Creek and tribs                      | Nutrients     |
| Onondaga | Minor Tribs to Onondaga Lake             | Nutrients     |
| Onondaga | Ninemile Creek, Lower, and tribs         | Nutrients     |
| Onondaga | Onondaga Creek, Lower, and tribs         | Nutrients     |
| Onondaga | Onondaga Creek, Middle, and tribs        | Nutrients     |

| Onondaga   | Onondaga Lake, northern end              | Nutrients     |
|------------|--|---------------|
| Onondaga   | Onondaga Lake, southern end              | Nutrients     |
| Ontario    | Great Brook and minor tribs              | Silt/Sediment |
| Ontario    | Great Brook and minor tribs              | Nutrients     |
| Ontario    | Hemlock Lake Outlet and minor tribs      | Nutrients     |
| Ontario    | Honeoye Lake                             | Nutrients     |
| Orange     | Greenwood Lake                           | Nutrients     |
| Orange     | Monhagen Brook and tribs                 | Nutrients     |
| Orange     | Orange Lake                              | Nutrients     |
| Orleans    | Lake Ontario Shoreline, Western          | Nutrients     |
| Orleans    | Lake Ontario Shoreline, Western          | Nutrients     |
| Oswego     | Lake Neatahwanta                         | Nutrients     |
| Oswego     | Pleasant Lake                            | Nutrients     |
| Putnam     | Bog Brook Reservoir                      | Nutrients     |
| Putnam     | Boyd Corners Reservoir                   | Nutrients     |
| Putnam     | Croton Falls Reservoir                   | Nutrients     |
| Putnam     | Diverting Reservoir                      | Nutrients     |
| Putnam     | East Branch Reservoir                    | Nutrients     |
| Putnam     | Lake Carmel                              | Nutrients     |
| Putnam     | Middle Branch Reservoir                  | Nutrients     |
| Putnam     | Oscawana Lake                            | Nutrients     |
| Putnam     | Palmer Lake                              | Nutrients     |
| Putnam     | West Branch Reservoir                    | Nutrients     |
| Queens     | Bergen Basin                             | Nutrients     |
| Queens     | Flushing Creek/Bay                       | Nutrients     |
| Queens     | Jamaica Bay, Eastern, and tribs (Queens) | Nutrients     |
| Queens     | Kissena Lake                             | Nutrients     |
| Queens     | Meadow Lake                              | Nutrients     |
| Queens     | Willow Lake                              | Nutrients     |
| Rensselaer | Nassau Lake                              | Nutrients     |
| Rensselaer | Snyders Lake                             | Nutrients     |
| Richmond   | Grasmere Lake/Bradys Pond                | Nutrients     |
| Rockland   | Congers Lake, Swartout Lake              | Nutrients     |
| Rockland   | Rockland Lake                            | Nutrients     |
| Saratoga   | Ballston Lake                            | Nutrients     |
| Saratoga   | Dwaas Kill and tribs                     | Silt/Sediment |
| Saratoga   | Dwaas Kill and tribs                     | Nutrients     |
| Saratoga   | Lake Lonely                              | Nutrients     |
| Saratoga   | Round Lake                               | Nutrients     |
| Saratoga   | Tribs to Lake Lonely                     | Nutrients     |

| Schenectady | Collins Lake                            | Nutrients     |
|-------------|---|---------------|
| Schenectady | Duane Lake                              | Nutrients     |
| Schenectady | Mariaville Lake                         | Nutrients     |
| Schoharie   | Engleville Pond                         | Nutrients     |
| Schoharie   | Summit Lake                             | Nutrients     |
| Seneca      | Reeder Creek and tribs                  | Nutrients     |
| St.Lawrence | Black Lake Outlet/Black Lake            | Nutrients     |
| St.Lawrence | Fish Creek and minor tribs              | Nutrients     |
| Steuben     | Smith Pond                              | Nutrients     |
| Suffolk     | Agawam Lake                             | Nutrients     |
| Suffolk     | Big/Little Fresh Ponds                  | Nutrients     |
| Suffolk     | Canaan Lake                             | Silt/Sediment |
| Suffolk     | Canaan Lake                             | Nutrients     |
| Suffolk     | Flanders Bay, West/Lower Sawmill Creek  | Nutrients     |
| Suffolk     | Fresh Pond                              | Nutrients     |
| Suffolk     | Great South Bay, East                   | Nutrients     |
| Suffolk     | Great South Bay, Middle                 | Nutrients     |
| Suffolk     | Great South Bay, West                   | Nutrients     |
| Suffolk     | Lake Ronkonkoma                         | Nutrients     |
| Suffolk     | Long Island Sound, Suffolk County, West | Nutrients     |
| Suffolk     | Mattituck (Marratooka) Pond             | Nutrients     |
| Suffolk     | Meetinghouse/Terrys Creeks and tribs    | Nutrients     |
| Suffolk     | Mill and Seven Ponds                    | Nutrients     |
| Suffolk     | Millers Pond                            | Nutrients     |
| Suffolk     | Moriches Bay, East                      | Nutrients     |
| Suffolk     | Moriches Bay, West                      | Nutrients     |
| Suffolk     | Peconic River, Lower, and tidal tribs   | Nutrients     |
| Suffolk     | Quantuck Bay                            | Nutrients     |
| Suffolk     | Shinnecock Bay and Inlet                | Nutrients     |
| Suffolk     | Tidal tribs to West Moriches Bay        | Nutrients     |
| Sullivan    | Bodine, Montgomery Lakes                | Nutrients     |
| Sullivan    | Davies Lake                             | Nutrients     |
| Sullivan    | Evens Lake                              | Nutrients     |
| Sullivan    | Pleasure Lake                           | Nutrients     |
| Tompkins    | Cayuga Lake, Southern End               | Nutrients     |
| Tompkins    | Cayuga Lake, Southern End               | Silt/Sediment |
| Tompkins    | Owasco Inlet, Upper, and tribs          | Nutrients     |
| Ulster      | Ashokan Reservoir                       | Silt/Sediment |
| Ulster      | Esopus Creek, Upper, and minor tribs    | Silt/Sediment |
| Warren      | Hague Brook and tribs                   | Silt/Sediment |

| Warren      | Huddle/Finkle Brooks and tribs           | Silt/Sediment |
|-------------|--|---------------|
| Warren      | Indian Brook and tribs                   | Silt/Sediment |
| Warren      | Lake George                              | Silt/Sediment |
| Warren      | Tribs to L.George, Village of L George   | Silt/Sediment |
| Washington  | Cossayuna Lake                           | Nutrients     |
| Washington  | Lake Champlain, South Bay                | Nutrients     |
| Washington  | Tribs to L.George, East Shore            | Silt/Sediment |
| Washington  | Wood Cr/Champlain Canal and minor tribs  | Nutrients     |
| Wayne       | Port Bay                                 | Nutrients     |
| Westchester | Amawalk Reservoir                        | Nutrients     |
| Westchester | Blind Brook, Upper, and tribs            | Silt/Sediment |
| Westchester | Cross River Reservoir                    | Nutrients     |
| Westchester | Lake Katonah                             | Nutrients     |
| Westchester | Lake Lincolndale                         | Nutrients     |
| Westchester | Lake Meahagh                             | Nutrients     |
| Westchester | Lake Mohegan                             | Nutrients     |
| Westchester | Lake Shenorock                           | Nutrients     |
| Westchester | Long Island Sound, Westchester (East)    | Nutrients     |
| Westchester | Mamaroneck River, Lower                  | Silt/Sediment |
| Westchester | Mamaroneck River, Upper, and minor tribs | Silt/Sediment |
| Westchester | Muscoot/Upper New Croton Reservoir       | Nutrients     |
| Westchester | New Croton Reservoir                     | Nutrients     |
| Westchester | Peach Lake                               | Nutrients     |
| Westchester | Reservoir No.1 (Lake Isle)               | Nutrients     |
| Westchester | Saw Mill River, Lower, and tribs         | Nutrients     |
| Westchester | Saw Mill River, Middle, and tribs        | Nutrients     |
| Westchester | Sheldrake River and tribs                | Silt/Sediment |
| Westchester | Sheldrake River and tribs                | Nutrients     |
| Westchester | Silver Lake                              | Nutrients     |
| Westchester | Teatown Lake                             | Nutrients     |
| Westchester | Titicus Reservoir                        | Nutrients     |
| Westchester | Truesdale Lake                           | Nutrients     |
| Westchester | Wallace Pond                             | Nutrients     |
| Wyoming     | Java Lake                                | Nutrients     |
| Wyoming     | Silver Lake                              | Nutrients     |

# APPENDIX F – List of NYS DEC Regional Offices

| <u>Region</u> | COVERING THE FOLLOWING COUNTIES:  | DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS                                      | DIVISION OF WATER<br>(DOW)<br>WATER (SPDES) PROGRAM  |
|---------------|---|--|--|
| 1             | NASSAU AND SUFFOLK  | 50 CIRCLE ROAD<br>STONY BROOK, NY 11790<br>Tel. (631) 444-0365                                     | 50 CIRCLE ROAD<br>STONY BROOK, NY 11790-3409<br>Tel. (631) 444-0405                                |
| 2             | BRONX, KINGS, NEW YORK,<br>QUEENS AND RICHMOND  | 1 HUNTERS POINT PLAZA,<br>47-40 21ST ST.<br>LONG ISLAND CITY, NY 11101-5407<br>TEL. (718) 482-4997 | 1 HUNTERS POINT PLAZA,<br>47-40 21ST ST.<br>LONG ISLAND CITY, NY 11101-5407<br>TEL. (718) 482-4933 |
| 3             | DUTCHESS, ORANGE, PUTNAM,<br>ROCKLAND, SULLIVAN, ULSTER<br>AND WESTCHESTER  | 21 SOUTH PUTT CORNERS ROAD<br>NEW PALTZ, NY 12561-1696<br>TEL. (845) 256-3059                      | 100 HILLSIDE AVENUE, SUITE 1W<br>WHITE PLAINS, NY 10603<br>TEL. (914) 428 - 2505                   |
| 4             | ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE                     | 1150 NORTH WESTCOTT ROAD<br>SCHENECTADY, NY 12306-2014<br>Tel. (518) 357-2069                      | 1130 NORTH WESTCOTT ROAD<br>SCHENECTADY, NY 12306-2014<br>Tel. (518) 357-2045                      |
| 5             | CLINTON, ESSEX, FRANKLIN,<br>FULTON, HAMILTON,<br>SARATOGA, WARREN AND<br>WASHINGTON                              | 1115 STATE ROUTE 86, Po Box 296<br>Ray Brook, Ny 12977-0296<br>Tel. (518) 897-1234                 | 232 GOLF COURSE ROAD<br>WARRENSBURG, NY 12885-1172 TEL.<br>(518) 623-1200                          |
| 6             | HERKIMER, JEFFERSON,<br>LEWIS, ONEIDA AND<br>ST. LAWRENCE   | STATE OFFICE BUILDING<br>317 WASHINGTON STREET<br>WATERTOWN, NY 13601-3787<br>TEL. (315) 785-2245  | STATE OFFICE BUILDING<br>207 GENESEE STREET<br>UTICA, NY 13501-2885 TEL. (315)<br>793-2554         |
| 7             | BROOME, CAYUGA,<br>CHENANGO, CORTLAND,<br>MADISON, ONONDAGA,<br>OSWEGO, TIOGA AND<br>TOMPKINS                     | 615 ERIE BLVD. WEST<br>SYRACUSE, NY 13204-2400<br>TEL. (315) 426-7438                              | 615 ERIE BLVD. WEST<br>SYRACUSE, NY 13204-2400<br>TEL. (315) 426-7500                              |
| 8             | CHEMUNG, GENESEE,<br>LIVINGSTON, MONROE,<br>ONTARIO, ORLEANS,<br>SCHUYLER, SENECA,<br>STEUBEN, WAYNE AND<br>YATES | 6274 EAST AVON-LIMA<br>ROADAVON, NY 14414-9519<br>TEL. (585) 226-2466                              | 6274 EAST AVON-LIMA RD.<br>AVON, NY 14414-9519<br>TEL. (585) 226-2466                              |
| 9             | ALLEGANY,<br>CATTARAUGUS,<br>CHAUTAUQUA, ERIE,<br>NIAGARA AND WYOMING   | 270 MICHIGAN AVENUE<br>BUFFALO, NY 14203-2999<br>TEL. (716) 851-7165                               | 270 MICHIGAN AVENUE<br>BUFFALO, NY 14203-2999<br>TEL. (716) 851-7070                               |

# Appendix B Notice of Intent

# NOI for coverage under Stormwater General Permit for Construction Activity

version 1.31

(Submission #: HPB-81WH-2JX20, version 1)

# **Details**

Originally Started By Camie Jarrell

**Submission ID** HPB-81WH-2JX20

Submission Reason New

**Status** Draft

Active Steps Form Submitted

# **Form Input**

# **Owner/Operator Information**

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)

Borrego

**Owner/Operator Contact Person Last Name (NOT CONSULTANT)** 

Smith

**Owner/Operator Contact Person First Name** 

Brandon

**Owner/Operator Mailing Address** 

NONE PROVIDED

City

NONE PROVIDED

State

# Zip

NONE PROVIDED

### **Phone**

6038199693

### **Email**

bsmith@borregosolar.com

# Federal Tax ID

NONE PROVIDED

# **Project Location**

# **Project/Site Name**

Reynolds Road Wind Energy Project

# Street Address (Not P.O. Box)

411 Reynolds Road

## **Side of Street**

East

# City/Town/Village (THAT ISSUES BUILDING PERMIT)

Town of Glen

### **State**

NY

### Zip

12072

# **DEC Region**

4

# County

MONTGOMERY

## **Name of Nearest Cross Street**

NONE PROVIDED

# **Distance to Nearest Cross Street (Feet)**

NONE PROVIDED

# **Project In Relation to Cross Street**

NONE PROVIDED

# **Tax Map Numbers Section-Block-Parcel**

# Tax Map Numbers NONE PROVIDED

### 1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:

- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates 42.87348528278413,-74.32267725733367

# **Project Details**

2. What is the nature of this project?

NONE PROVIDED

3. Select the predominant land use for both pre and post development conditions.

**Pre-Development Existing Landuse** 

NONE PROVIDED

**Post-Development Future Land Use** 

NONE PROVIDED

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. 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 Area (acres)

NONE PROVIDED

Total Area to be Disturbed (acres)

NONE PROVIDED

Existing Impervious Area to be Disturbed (acres)

# Future Impervious Area Within Disturbed Area (acres)

NONE PROVIDED

# 5. Do you plan to disturb more than 5 acres of soil at any one time?

NONE PROVIDED

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)

NONE PROVIDED

B (%)

NONE PROVIDED

C (%)

NONE PROVIDED

D (%)

NONE PROVIDED

# 7. Is this a phased project?

NONE PROVIDED

8. Enter the planned start and end dates of the disturbance activities.

### **Start Date**

NONE PROVIDED

### **End Date**

NONE PROVIDED

# 9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

NONE PROVIDED

# 9a. Type of waterbody identified in question 9?

NONE PROVIDED

# Other Waterbody Type Off Site Description

NONE PROVIDED

# 9b. If "wetland" was selected in 9A, how was the wetland identified?

NONE PROVIDED

# 10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?

NONE PROVIDED

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?

NONE PROVIDED

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? NONE PROVIDED

If Yes, what is the acreage to be disturbed?

NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

NONE PROVIDED

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?

NONE PROVIDED

16. What is the name of the municipality/entity that owns the separate storm sewer system?

NONE PROVIDED

- 17. Does any runoff from the site enter a sewer classified as a Combined Sewer? NONE PROVIDED
- 18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?

NONE PROVIDED

19. Is this property owned by a state authority, state agency, federal government or local government?

NONE PROVIDED

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)

NONE PROVIDED

# **Required SWPPP Components**

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?

NONE PROVIDED

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? NONE PROVIDED

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?

NONE PROVIDED

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by: NONE PROVIDED

# **SWPPP Preparer**

NONE PROVIDED

Contact Name (Last, Space, First)

NONE PROVIDED

### Mailing Address

NONE PROVIDED

### City

NONE PROVIDED

### State

NONE PROVIDED

### Zip

NONE PROVIDED

### **Phone**

NONE PROVIDED

### **Email**

NONE PROVIDED

## **Download SWPPP Preparer Certification Form**

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
- 2) The certified SWPPP preparer should sign this form

- 3) Scan the signed form
- 4) Upload the scanned document

<u>Download SWPPP Preparer Certification Form</u>

# Please upload the SWPPP Preparer Certification

NONE PROVIDED
Comment
NONE PROVIDED

# **Erosion & Sediment Control Criteria**

25. Has a construction sequence schedule for the planned management practices been prepared?

NONE PROVIDED

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

Temporary Structural

NONE PROVIDED

Biotechnical

NONE PROVIDED

**Vegetative Measures** 

NONE PROVIDED

**Permanent Structural** 

NONE PROVIDED

Other

NONE PROVIDED

# **Post-Construction Criteria**

- \* IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.
- 27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

NONE PROVIDED

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

# 28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)

NONE PROVIDED

### 29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

- 30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)

  NONE PROVIDED
- 31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?

NONE PROVIDED

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
NONE PROVIDED

# 32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

NONE PROVIDED

# If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

### 33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)

NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

- 34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). NONE PROVIDED
- 35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?

  NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)

NONE PROVIDED

**CPv Provided (acre-feet)** 

NONE PROVIDED

**36a. The need to provide channel protection has been waived because:** NONE PROVIDED

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

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)

NONE PROVIDED

Post-Development (CFS)

NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

# **Pre-Development (CFS)**

NONE PROVIDED

# Post-Development (CFS)

NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because: NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?

NONE PROVIDED

If Yes, Identify the entity responsible for the long term Operation and Maintenance NONE PROVIDED

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

NONE PROVIDED

# **Post-Construction SMP Identification**

# Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs

Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

# **RR Techniques (Area Reduction)**

Round to the nearest tenth

**Total Contributing Acres for Conservation of Natural Area (RR-1)**NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

**Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)**NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

| Total Contributing Acres for | or Tree | Planting/Tre | e Pit (RR-3) |
|------------------------------|---------|--------------|--------------|
| NONE PROVIDED                |         |              |              |

**Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)**NONE PROVIDED

**Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)**NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

**Total Contributing Impervious Acres for Vegetated Swale (RR-5)**NONE PROVIDED

**Total Contributing Impervious Acres for Rain Garden (RR-6)**NONE PROVIDED

**Total Contributing Impervious Acres for Stormwater Planter (RR-7)**NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

**Total Contributing Impervious Acres for Porous Pavement (RR-9)**NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

**Total Contributing Impervious Acres for Infiltration Trench (I-1)**NONE PROVIDED

**Total Contributing Impervious Acres for Infiltration Basin (I-2)**NONE PROVIDED

**Total Contributing Impervious Acres for Dry Well (I-3)**NONE PROVIDED

**Total Contributing Impervious Acres for Underground Infiltration System (I-4)**NONE PROVIDED

**Total Contributing Impervious Acres for Bioretention (F-5)**NONE PROVIDED

# **Total Contributing Impervious Acres for Dry Swale (O-1)**NONE PROVIDED

### Standard SMPs

**Total Contributing Impervious Acres for Micropool Extended Detention (P-1)**NONE PROVIDED

**Total Contributing Impervious Acres for Wet Pond (P-2)**NONE PROVIDED

**Total Contributing Impervious Acres for Wet Extended Detention (P-3)**NONE PROVIDED

**Total Contributing Impervious Acres for Multiple Pond System (P-4)**NONE PROVIDED

**Total Contributing Impervious Acres for Pocket Pond (P-5)**NONE PROVIDED

**Total Contributing Impervious Acres for Surface Sand Filter (F-1)**NONE PROVIDED

**Total Contributing Impervious Acres for Underground Sand Filter (F-2)**NONE PROVIDED

**Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)**NONE PROVIDED

**Total Contributing Impervious Acres for Organic Filter (F-4)**NONE PROVIDED

**Total Contributing Impervious Acres for Shallow Wetland (W-1)**NONE PROVIDED

**Total Contributing Impervious Acres for Extended Detention Wetland (W-2)**NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

**Total Contributing Impervious Acres for Pocket Wetland (W-4)**NONE PROVIDED

**Total Contributing Impervious Acres for Wet Swale (O-2)**NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

# **Total Contributing Impervious Area for Hydrodynamic**NONE PROVIDED

# **Total Contributing Impervious Area for Wet Vault**NONE PROVIDED

**Total Contributing Impervious Area for Media Filter**NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

**Total Contributing Impervious Area for "Other"**NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP NONE PROVIDED

Name of Alternative SMP NONE PROVIDED

# **Other Permits**

40. Identify other DEC permits, existing and new, that are required for this project/facility.

NONE PROVIDED

If SPDES Multi-Sector GP, then give permit ID NONE PROVIDED

If Other, then identify NONE PROVIDED

**41. Does this project require a US Army Corps of Engineers Wetland Permit?**NONE PROVIDED

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

NONE PROVIDED

# **MS4 SWPPP Acceptance**

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?

NONE PROVIDED

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?

NONE PROVIDED

## MS4 SWPPP Acceptance Form Download

Download form from the link below. Complete, sign, and upload. MS4 SWPPP Acceptance Form

# **MS4 Acceptance Form Upload**

NONE PROVIDED Comment

NONE PROVIDED

# **Owner/Operator Certification**

# **Owner/Operator Certification Form Download**

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

Owner/Operator Certification Form (PDF, 45KB)

# **Upload Owner/Operator Certification Form**

NONE PROVIDED

Comment

NONE PROVIDED

# **Status History**

|                      | User          | <b>Processing Status</b> |
|----------------------|---------------|--------------------------|
| 8/25/2021 5:27:26 PM | Camie Jarrell | Draft                    |

# **Processing Steps**

| Step Name      | Assigned To/Completed By | Date Completed |
|----------------|--------------------------|----------------|
| Form Submitted |                          |                |
| Under Review   | DAVID GASPER             |                |

# Appendix C

NYSDEC Acknowledgement Letter (to be added upon receipt)

# Appendix D County Soil Reports

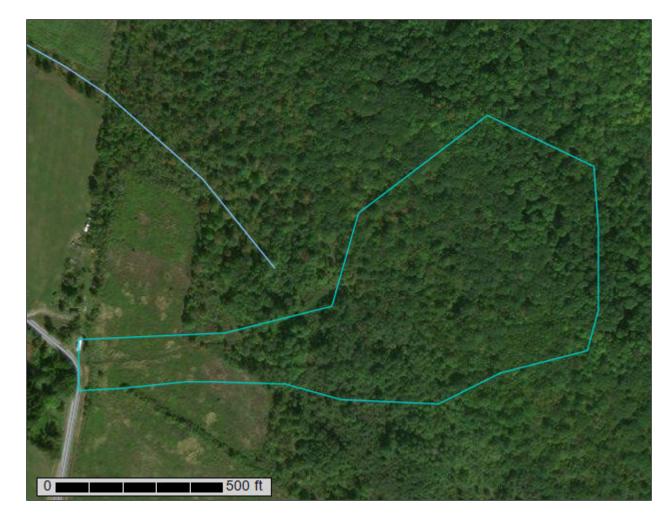


Natural Resources Conservation

Service

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

# Custom Soil Resource Report for Montgomery County, New York



### **Preface**

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

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

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

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

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

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

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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# **How Soil Surveys Are Made**

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

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

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

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

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

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

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

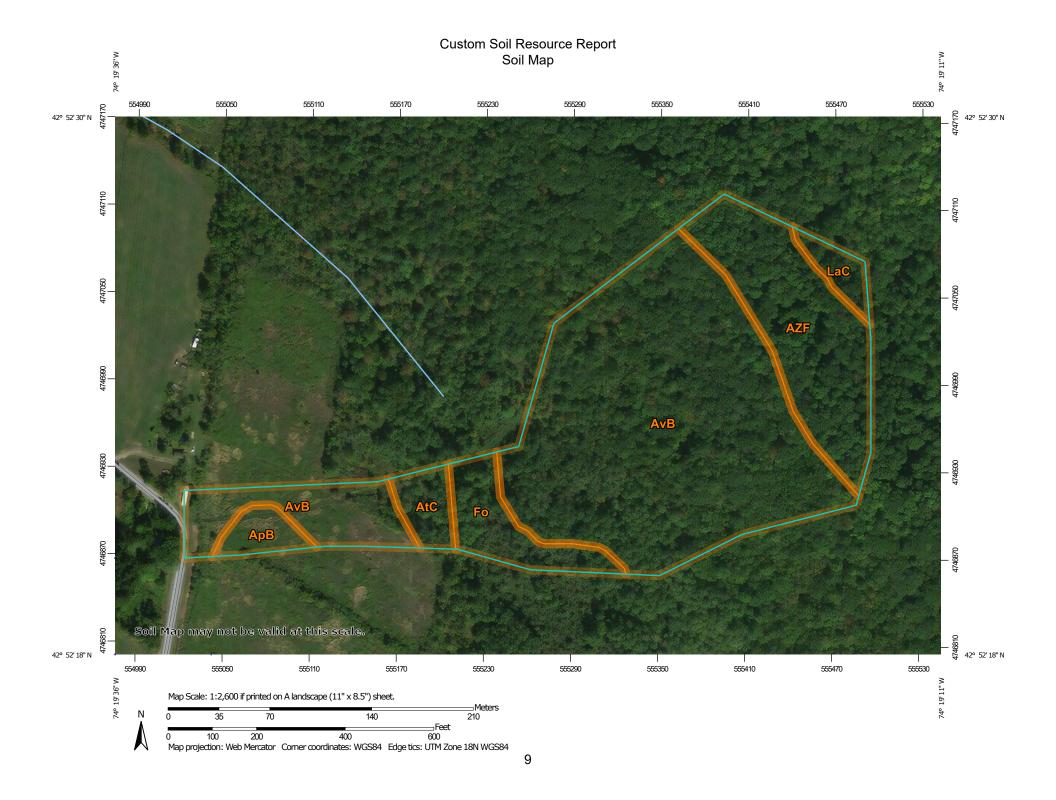
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

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



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

#### **Special Point Features**

(o)

Blowout

Borrow Pit

Clay Spot

**Closed Depression** 

Gravel Pit Gravelly Spot

Landfill

Lava Flow Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

å

Spoil Area Stony Spot

Very Stony Spot

Ŷ

Wet Spot Other

Δ

Special Line Features

#### Water Features

Streams and Canals

#### Transportation

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Rails

Interstate Highways

**US Routes** 

Major Roads

00

Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Montgomery County, New York Survey Area Data: Version 18, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Oct 7, 2013—Nov 9, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

#### Map Unit Legend

| Map Unit Symbol             | Map Unit Name   | Acres in AOI | Percent of AOI |
|-----------------------------|---|--------------|----------------|
| АрВ                         | Appleton silt loam, 3 to 8 percent slopes               | 0.4          | 2.6%           |
| AtC                         | Arnot channery silt loam, 8 to 15 percent slopes, rocky | 0.5          | 3.1%           |
| AvB                         | Arnot-Angola channery silt loams, 3 to 8 percent slopes | 9.9          | 66.6%          |
| AZF                         | Arnot-Rock outcrop association, very steep              | 2.8          | 18.9%          |
| Fo                          | Fonda mucky silty clay loam                             | 1.0          | 6.6%           |
| LaC                         | Lansing silt loam, 8 to 15 percent slopes               | 0.3          | 2.2%           |
| Totals for Area of Interest | ,   | 14.8         | 100.0%         |

#### **Map Unit Descriptions**

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

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

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

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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

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

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

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

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

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

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

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

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

#### **Montgomery County, New York**

#### ApB—Appleton silt loam, 3 to 8 percent slopes

#### **Map Unit Setting**

National map unit symbol: 2w5ht Elevation: 260 to 1,740 feet

Mean annual precipitation: 31 to 57 inches Mean annual air temperature: 41 to 50 degrees F

Frost-free period: 100 to 190 days

Farmland classification: Prime farmland if drained

#### **Map Unit Composition**

Appleton and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Appleton**

#### Setting

Landform: Drumlins, ridges, till plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Calcareous loamy lodgment till derived from limestone,

sandstone, and shale

#### Typical profile

Ap - 0 to 8 inches: silt loam E - 8 to 16 inches: loam

Bt - 16 to 30 inches: gravelly silt loam C1 - 30 to 54 inches: gravelly loam C2 - 54 to 79 inches: gravelly loam

#### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.01 to 1.42 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

#### **Minor Components**

#### Conesus

Percent of map unit: 7 percent Landform: Till plains, drumlins, hills

Landform position (two-dimensional): Shoulder, summit

Landform position (three-dimensional): Crest

Down-slope shape: Linear Across-slope shape: Convex Hydric soil rating: No

#### Lyons

Percent of map unit: 5 percent

Landform: Drainageways, depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

#### Darien

Percent of map unit: 4 percent Landform: Drainageways, till plains

Landform position (two-dimensional): Footslope, summit Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### Churchville

Percent of map unit: 4 percent Landform: Till plains, lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope, rise, talf

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### AtC—Arnot channery silt loam, 8 to 15 percent slopes, rocky

#### **Map Unit Setting**

National map unit symbol: 9tnq Elevation: 1,000 to 1,800 feet

Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Arnot and similar soils: 75 percent

Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Arnot**

#### Setting

Landform: Ridges, hills, benches

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and

shale

#### **Typical profile**

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 16 inches: channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 8 to 15 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Ecological site: F140XY023NY - Shallow Till Uplands

Hydric soil rating: No

#### **Minor Components**

#### Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

#### Angola

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Unnamed soils**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Manlius**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Tuller**

Percent of map unit: 4 percent

Hydric soil rating: No

#### Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

#### AvB—Arnot-Angola channery silt loams, 3 to 8 percent slopes

#### Map Unit Setting

National map unit symbol: 9tns Elevation: 620 to 1,800 feet

Mean annual precipitation: 38 to 44 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Arnot and similar soils: 50 percent Angola and similar soils: 30 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Arnot**

#### Setting

Landform: Ridges, hills, benches

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and

shale

#### **Typical profile**

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 16 inches: channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: D

Ecological site: F140XY023NY - Shallow Till Uplands

Hydric soil rating: No

#### **Description of Angola**

#### Setting

Landform: Till plains, benches, ridges

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Loamy till derived mainly from shale and siltstone

#### **Typical profile**

H1 - 0 to 9 inches: silt loam
H2 - 9 to 24 inches: silty clay loam
R - 24 to 28 inches: weathered bedrock

#### **Properties and qualities**

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 4.1 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

#### **Minor Components**

#### **Tuller**

Percent of map unit: 5 percent Hydric soil rating: No

#### Hornell

Percent of map unit: 5 percent Hydric soil rating: No

#### **Brockport**

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Varick**

Percent of map unit: 5 percent Landform: Depressions

Hydric soil rating: Yes

#### AZF—Arnot-Rock outcrop association, very steep

#### **Map Unit Setting**

National map unit symbol: 9tnt Elevation: 1,000 to 1,800 feet

Mean annual precipitation: 38 to 44 inches Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Arnot and similar soils: 50 percent

Rock outcrop: 30 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Arnot**

#### Setting

Landform: Benches, ridges, hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and

shale

#### Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 16 inches: channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 35 to 60 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: F140XY023NY - Shallow Till Uplands

Hydric soil rating: No

#### **Description of Rock Outcrop**

#### Typical profile

H1 - 0 to 60 inches: unweathered bedrock

#### **Properties and qualities**

Slope: 35 to 60 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydric soil rating: Unranked

#### **Minor Components**

#### Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

#### Nassau

Percent of map unit: 5 percent

Hydric soil rating: No

#### Tuller

Percent of map unit: 5 percent

Hydric soil rating: No

#### **Manlius**

Percent of map unit: 5 percent

Hydric soil rating: No

#### Fo-Fonda mucky silty clay loam

#### **Map Unit Setting**

National map unit symbol: 9tpn Elevation: 50 to 650 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Fonda and similar soils: 75 percent *Minor components*: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Fonda**

#### Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Tread

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Clayey glaciolacustrine deposits

#### **Typical profile**

O - 0 to 3 inches: muck

H1 - 3 to 9 inches: mucky silty clay loam

H2 - 9 to 17 inches: silty clay H3 - 17 to 37 inches: silty clay H4 - 37 to 60 inches: silty clay

#### Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr) Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: High (about 10.1 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: C/D Hydric soil rating: Yes

#### **Minor Components**

#### Madalin

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

#### **Palms**

Percent of map unit: 5 percent Landform: Swamps, marshes Hydric soil rating: Yes

#### Rhinebeck

Percent of map unit: 5 percent Hydric soil rating: No

#### Hudson

Percent of map unit: 5 percent Hydric soil rating: No

#### Churchville

Percent of map unit: 5 percent Hydric soil rating: No

#### LaC—Lansing silt loam, 8 to 15 percent slopes

#### **Map Unit Setting**

National map unit symbol: 2w3mh Elevation: 330 to 2,130 feet

Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F

Frost-free period: 100 to 190 days

Farmland classification: Farmland of statewide importance

#### **Map Unit Composition**

Lansing and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Lansing**

#### Setting

Landform: Till plains, drumlins, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Calcareous loamy lodgment till derived from limestone,

sandstone, and shale

#### Typical profile

Ap - 0 to 8 inches: silt loam

E - 8 to 13 inches: gravelly silt loam

Bt/E - 13 to 21 inches: gravelly silt loam

Bt1 - 21 to 28 inches: gravelly silt loam

Bt2 - 28 to 39 inches: gravelly silt loam

C - 39 to 79 inches: gravelly loam

#### **Properties and qualities**

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.01 to 1.42 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F101XY012NY - Till Upland

Hydric soil rating: No

#### **Minor Components**

#### Conesus

Percent of map unit: 8 percent Landform: Till plains, drumlins, hills

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Linear Across-slope shape: Convex Hydric soil rating: No

#### Kendaia

Percent of map unit: 3 percent Landform: Till plains, drumlins

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### **Appleton**

Percent of map unit: 2 percent Landform: Drumlins, till plains

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

#### **Danley**

Percent of map unit: 1 percent

Landform: Hills, till plains, drumlinoid ridges Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

#### Wassaic

Percent of map unit: 1 percent

Landform: Till plains, benches, ridges

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex Hydric soil rating: No

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# Appendix E

Stormwater Pollution Prevention Plan Certifications

# STORMWATER POLLUTION PREVENTION PLAN 411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN BORREGO SOLAR

#### Owner/Operator's Certification Statement

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

| Owner/Operator's Name                          |
|--|
| Address  |
| Phone Number                                   |
| Owner/Operator's Representative Name and Title |
| Representative Signature                       |
| Date   |

# STORMWATER POLLUTION PREVENTION PLAN 411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN BORREGO SOLAR

#### **Contractor's Certification Statement**

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

| Contractor's Name                               |   |
|---|---|
|   |   |
| Address   |   |
|   |   |
| Phone Number                                    |   |
| Contractor's Representative Name and Title      |   |
|   |   |
| Representative Signature                        | Date  |
| Identify the specific elements of the SWPPP the | contractor/subcontractor is responsible for |
| ,         | ,,  |
|   |   |
|   |   |
|   |   |
|   |   |

# STORMWATER POLLUTION PREVENTION PLAN 411 REYNOLDS ROAD WIND PROJECT, TOWN OF GLEN BORREGO SOLAR

#### Subcontractor's Certification Statement

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

| Subcontractor's Name                                     |                                       |
|--|---------------------------------------|
|  |                                       |
| Address  |                                       |
| Dhana Namban   |                                       |
| Phone Number   |                                       |
| Subcontractor's Representative Name and Title            |                                       |
| Representative Signature                                 | Date                                  |
| Identify the specific elements of the SWPPP the contract | tor/subcontractor is responsible for: |
|  |                                       |
|  |                                       |
|  |                                       |
|  |                                       |
|  |                                       |

<sup>\*</sup>Copy this page as needed for additional subcontractors

# Appendix F

Stormwater Calculations and Modeling Results

Version 1.8 Tota Last Updated: 11/09/2015 W

# Total Water Quality Volume Calculation WQv(acre-feet) = [(P)(Rv)(A)] /12

Design Point: 1
P= 1.00 inch

Manually enter P, Total Area and Impervious Cover.

| Breakdown of Subcatchments |                       |                         |                            |                          |       |               |  |
|----------------------------|-----------------------|-------------------------|----------------------------|--------------------------|-------|---------------|--|
| Catchment<br>Number        | Total Area<br>(Acres) | Impervious Area (Acres) | Percent<br>Impervious<br>% | Percent<br>Impervious Rv |       | Description   |  |
| 1                          | 1.00                  | 0.25                    | 25%                        | 0.28                     | 998   | Dry Swale     |  |
| 2                          | 1.99                  | 0.49                    | 25%                        | 0.27                     | 1,962 | Filter Strips |  |
| 3                          | 0.95                  | 0.23                    | 24%                        | 0.27                     | 924   | Filter Strips |  |
| 4                          | 0.32                  | 0.12                    | 38%                        | 0.39                     | 450   | Dry Swale     |  |
| 5                          |                       |                         |                            |                          |       |               |  |
| 6                          |                       |                         |                            |                          |       |               |  |
| 7                          |                       |                         |                            |                          |       |               |  |
| 8                          |                       |                         |                            |                          |       |               |  |
| 9                          |                       |                         |                            |                          |       |               |  |
| 10                         |                       |                         |                            |                          |       |               |  |
| Subtotal (1-30)            | 4.26                  | 1.09                    | 26%                        | 0.28                     | 4,334 | Subtotal 1    |  |
| Total                      | 4.26                  | 1.09                    | 26%                        | 0.28                     | 4,334 | Initial WQv   |  |

| Identify Runoff Reduction Techniques By Area |                               |                                 |  |  |  |  |  |
|--|-------------------------------|---------------------------------|--|--|--|--|--|
| Technique                                    | Total<br>Contributing<br>Area | Contributing<br>Impervious Area | Notes  |  |  |  |  |
|  | (Acre)                        | (Acre)                          |  |  |  |  |  |
| Conservation of Natural Areas                | 0.00                          | 0.00                            | minimum 10,000 sf  |  |  |  |  |
| Riparian Buffers                             | 0.00                          | 0.00                            | maximum contributing length 75 feet to 150 feet                            |  |  |  |  |
| Filter Strips                                | 2.94                          | 0.72                            |  |  |  |  |  |
| Tree Planting                                | 0.00                          | 0.00                            | Up to 100 sf directly connected impervious area may be subtracted per tree |  |  |  |  |
| Total  | 2.94                          | 0.72                            |  |  |  |  |  |

| Recalculate WQv after application of Area Reduction Techniques   |                       |                            |                            |                             |                           |  |  |  |  |
|--|-----------------------|----------------------------|----------------------------|-----------------------------|---------------------------|--|--|--|--|
|  | Total Area<br>(Acres) | Impervious Area<br>(Acres) | Percent<br>Impervious<br>% | Runoff<br>Coefficient<br>Rv | WQv<br>(ft <sup>3</sup> ) |  |  |  |  |
| "< <initial td="" wqv"<=""><td>4.26</td><td>1.09</td><td>26%</td><td>0.28</td><td>4,334</td></initial> | 4.26                  | 1.09                       | 26%                        | 0.28                        | 4,334                     |  |  |  |  |
| Subtract Area  | -2.94                 | -0.72                      |                            |                             |                           |  |  |  |  |
| WQv adjusted after Area<br>Reductions  | 1.32                  | 0.37                       | 28%                        | 0.30                        | 1,448                     |  |  |  |  |
| Disconnection of Rooftops  |                       | 0.00                       |                            |                             |                           |  |  |  |  |
| Adjusted WQv after Area<br>Reduction and Rooftop<br>Disconnect   | 1.32                  | 0.37                       | 28%                        | 0.30                        | 1,448                     |  |  |  |  |
| WQv reduced by Area<br>Reduction techniques  |                       |                            |                            |                             | 2,886                     |  |  |  |  |

|                                 | Runoff Reduction Volume and Treated volumes    |               |                               |   |                         |                |  |  |
|---------------------------------|--|---------------|-------------------------------|---|-------------------------|----------------|--|--|
|                                 | Runoff Reduction Techiques/Standard SMPs       |               | Total<br>Contributing<br>Area | Total<br>Contributing<br>Impervious<br>Area | WQv<br>Reduced<br>(RRv) | WQv<br>Treated |  |  |
|                                 |  |               | (acres)                       | (acres)                                     | cf                      | cf             |  |  |
|                                 | Conservation of Natural Areas                  | RR-1          | 0.00                          | 0.00  |                         |                |  |  |
| Area/Volume Reduction           | Sheetflow to Riparian Buffers/Filter<br>Strips | RR-2          | 2.94                          | 0.72  |                         |                |  |  |
| gnc                             | Tree Planting/Tree Pit                         | RR-3          | 0.00                          | 0.00  |                         |                |  |  |
| Rec                             | Disconnection of Rooftop Runoff                | RR-4          |                               | 0.00  |                         |                |  |  |
| me                              | Vegetated Swale                                | RR-5          | 0.00                          | 0.00  | 0                       |                |  |  |
| olu                             | Rain Garden                                    | RR-6          | 0.00                          | 0.00  | 0                       |                |  |  |
| a∕                              | Stormwater Planter                             | RR-7          | 0.00                          | 0.00  | 0                       |                |  |  |
| Are                             | Rain Barrel/Cistern                            | RR-8          | 0.00                          | 0.00  | 0                       |                |  |  |
|                                 | Porous Pavement                                | RR-9          | 0.00                          | 0.00  | 0                       |                |  |  |
|                                 | Green Roof (Intensive & Extensive)             | RR-10         | 0.00                          | 0.00  | 0                       |                |  |  |
| ZR.                             | Infiltration Trench                            | I-1           | 0.00                          | 0.00  | 0                       | 0              |  |  |
| /w                              | Infiltration Basin                             | I-2           | 0.00                          | 0.00  | 0                       | 0              |  |  |
| 1Ps<br>city                     | Dry Well                                       | I-3           | 0.00                          | 0.00  | 0                       | 0              |  |  |
| rd SMPs<br>Capacity             | Underground Infiltration System                | I-4           |                               |   |                         |                |  |  |
| Standard SMPs w/RRv<br>Capacity | Bioretention & Infiltration Bioretention       | F-5           | 0.00                          | 0.00  | 0                       | 0              |  |  |
| Sta                             | Dry swale                                      | 0-1           | 1.32                          | 0.37  | 1276                    | 172            |  |  |
|                                 | Micropool Extended Detention (P-1)             | P-1           |                               |   |                         |                |  |  |
|                                 | Wet Pond (P-2)                                 | P-2           |                               |   |                         |                |  |  |
|                                 | Wet Extended Detention (P-3)                   | P-3           |                               |   |                         |                |  |  |
|                                 | Multiple Pond system (P-4)                     | P-4           |                               |   |                         |                |  |  |
| S                               | Pocket Pond (p-5)                              | P-5           |                               |   |                         |                |  |  |
| SMPs                            | Surface Sand filter (F-1)                      | F-1           |                               |   |                         |                |  |  |
| 5                               | Underground Sand filter (F-2)                  | F-2           |                               |   |                         |                |  |  |
| nda                             | Perimeter Sand Filter (F-3)                    | F-3           |                               |   |                         |                |  |  |
| Standard SI                     | Organic Filter (F-4                            | F-4           |                               |   |                         |                |  |  |
|                                 | Shallow Wetland (W-1)                          | W-1           |                               |   |                         |                |  |  |
|                                 | Extended Detention Wetland (W-2                | W-2           |                               |   |                         |                |  |  |
|                                 | Pond/Wetland System (W-3)                      | W-3           |                               |   |                         |                |  |  |
|                                 | Pocket Wetland (W-4)                           | W-4           |                               |   |                         |                |  |  |
|                                 | Wet Swale (O-2)                                | 0-2           |                               |   |                         |                |  |  |
|                                 | Totals by Area Reduction                       | $\rightarrow$ | 2.94                          | 0.72  | 2886                    |                |  |  |
|                                 | Totals by Volume Reduction                     |               | 0.00                          | 0.00  | 0                       |                |  |  |
|                                 | Totals by Standard SMP w/RRV                   | $\rightarrow$ | 1.32                          | 0.37  | 1276                    | 172            |  |  |
|                                 | Totals by Standard SMP                         | $\rightarrow$ | 0.00                          | 0.00  |                         | 0              |  |  |
| To                              | otals ( Area + Volume + all SMPs)              | $\rightarrow$ | 4.26                          | 1.09  | 4,162                   | 172            |  |  |

## Minimum RRv

| Enter the Soils Da | ta for the site |      |
|--------------------|-----------------|------|
| Soil Group         | Acres           | S    |
| Α                  |                 | 55%  |
| В                  |                 | 40%  |
| С                  |                 | 30%  |
| D                  | 4.26            | 20%  |
| Total Area         | 4.26            |      |
| Calculate the Min  | imum RRv        |      |
| S =                | 0.20            |      |
| Impervious =       | 1.09            | acre |
| Precipitation      | 1               | in   |
| Rv                 | 0.95            |      |
| Minimum RRv        | 752             | ft3  |
| _                  | 0.02            | af   |

# Dry Swale Worksheet

| Design Point:                        | 1                     |                               |   |                 |                           |                                     |  |
|--------------------------------------|-----------------------|-------------------------------|---|-----------------|---------------------------|-------------------------------------|--|
|                                      | Enter                 | Site Data For                 | Drainage Area   | to be 1         | reated by                 | Practice                            |  |
| Catchment<br>Number                  | Total Area<br>(Acres) | Impervious<br>Area<br>(Acres) | Percent<br>Impervious<br>%  | Rv              | WQv<br>(ft <sup>3</sup> ) | Precipitation<br>(in)               | Description                            |
| 1                                    | 1.00                  | 0.25                          | 0.25  | 0.28            | 998.25                    | 1.00                                | Dry Swale                              |
| Enter Impervious<br>by Disconnection |                       | 0.00                          | 25% 0.28 998 < <wqv adjusting="" after="" disconnected="" for="" rooftops<="" td=""><td></td></wqv>                                 |                 |                           |                                     |  |
|                                      | Pretreatn             | nent Provided                 |   |                 |                           | Pretreatment To                     | echnique                               |
| Pretrea                              | tment (10% of         | WQv)                          | 100   | ft <sup>3</sup> |                           |                                     |  |
|                                      |                       | Calculat                      | e Available St  | orage C         | apacity                   |                                     |  |
| Bottom Width                         | 3                     | ft                            | _   |                 |                           | -                                   | ht feet to avoid<br>less than two feet |
| Side Slope<br>(X:1)                  | 4                     | Okay                          | Channels shall be designed with moderate side slopes (flatter than 3:1) for most conditions. 2:1 is the absolute maximum side slope |                 |                           |                                     |  |
| Longitudinal<br>Slope                | 0%                    | Okay                          |   |                 |                           |                                     |  |
| Flow Depth                           | 1.5                   | ft                            | 1   | a maxin         | num depth                 | foot at the mid<br>of 18" at the en | •                                      |
| Top Width                            | 15                    | ft                            |   |                 |                           | Γ <sub>w</sub>                      |  |
| Area                                 | 13.50                 | sf                            |   |                 |                           | d                                   |  |
| Minimum<br>Length                    | 67                    | ft                            |   |                 |                           | u                                   |  |
| Actual Length                        | 410                   | ft                            | 1   |                 | E                         | $B_{W}$                             |  |
| End Point<br>Depth check             | 0.50                  | Okay                          | A maximum of storage of the   |                 |                           | end point of the                    | channel (for                           |
| Storage<br>Capacity                  | 5,635                 | ft <sup>3</sup>               |   |                 |                           |                                     |  |
| Soil Group (HSG                      | )                     | •                             | D   |                 |                           |                                     |  |
|                                      |                       |                               | Runoff Redu   | ıction          |                           |                                     |  |
| Is the Dry Swale practice?           | contributing flo      | ow to another                 | Yes   | Select          | : Practice                | Other/St                            | andard SMP                             |
| RRv                                  | 998                   | ft <sup>3</sup>               | Runnoff Reduction equals 40% in HSG A and B and 20% in HSG C and D up to the WQv  |                 |                           |                                     |  |
| Volume<br>Treated                    | 0                     | ft <sup>3</sup>               | This is the difference between the WQv calculated and the runoff reduction achieved in the swale                                    |                 |                           |                                     |  |
| Volume<br>Directed                   | 0                     | ft <sup>3</sup>               | This volume is directed another practice  |                 |                           |                                     |  |
|                                      | Okay                  |                               |   |                 |                           | long enough to                      |  |

# Dry Swale Worksheet

| Design Point:                        | 1                     | ]                             |  |                 |                           |   |   |
|--------------------------------------|-----------------------|-------------------------------|--|-----------------|---------------------------|---|---|
|                                      | Enter                 | Site Data For                 | Drainage Area  | a to be 1       | Freated by                | Practice                                      |   |
| Catchment<br>Number                  | Total Area<br>(Acres) | Impervious<br>Area<br>(Acres) | Percent<br>Impervious<br>%   | Rv              | WQv<br>(ft <sup>3</sup> ) | Precipitation (in)                            | Description                             |
| 4                                    | 0.32                  | 0.12                          | 0.38   | 0.39            | 450.12                    | 1.00  | Dry Swale                               |
| Enter Impervious<br>by Disconnection |                       | 0.00                          | 38%  | 0.39            | 450                       | < <wqv ad<br="" after="">Disconnected R</wqv> | •                                       |
|                                      | Pretreatn             | nent Provided                 |  |                 |                           | Pretreatment T                                | echnique                                |
| Pretrea                              | atment (10% of        | -                             | 45   | ft <sup>3</sup> |                           |   |   |
|                                      |                       | Calculat                      | e Available St   | orage C         | apacity                   |   |   |
| Bottom Width                         | 2                     | ft                            | _  |                 |                           | -   | tht feet to avoid<br>less than two feet |
| Side Slope<br>(X:1)                  | 2.5                   | Okay                          | Channels shall be designed with moderate side slopes (flatter than 3:1) for most conditions. 2:1 is the absolute maximum side slope                    |                 |                           |   | slopes (flatter                         |
| Longitudinal<br>Slope                | 4%                    | Okay                          | Maximum longitudinal slope shall be 4%   |                 |                           |   |   |
| Flow Depth                           | 1.25                  | ft                            | Maximum ponding depth of one foot at the mid-point of the channel, and a maximum depth of 18" at the end point of the channel (for storage of the WQv) |                 |                           |   |   |
| Top Width                            | 8.25                  | ft                            |  |                 |                           | Γ <sub>W</sub>                                |   |
| Area                                 | 6.41                  | sf                            |  |                 | :                         | d   |   |
| Minimum<br>Length                    | 63                    | ft                            |  |                 |                           | u   |   |
| Actual Length                        | 210                   | ft                            |  |                 | E                         | 3 <sub>W</sub>                                |   |
| End Point<br>Depth check             | 0.50                  | Okay                          | A maximum of the storage of the  |                 | 18" at the                | end point of the                              | e channel (for                          |
| Storage<br>Capacity                  | 1,390                 | ft <sup>3</sup>               |  |                 |                           |   |   |
| Soil Group (HSG                      | )                     |                               | D  |                 |                           |   |   |
|                                      |                       |                               | Runoff Redu  | ıction          |                           |   |   |
| Is the Dry Swale practice?           | contributing flo      | ow to another                 | No   | Select          | Practice                  |   |   |
| RRv                                  | 278                   | ft <sup>3</sup>               | Runnoff Red  |                 | •                         | in HSG A and B                                | and 20% in HSG C                        |
| Volume<br>Treated                    | 172                   | ft <sup>3</sup>               | This is the dif  |                 |                           | · ·   | ted and the runoff                      |
| Volume<br>Directed                   | 0                     | ft <sup>3</sup>               | This volume is directed another practice   |                 |                           |   |   |
| Volume √                             | Okay                  |                               | Check to be sure that channel is long enough to store WQv  |                 |                           |   |   |

# Filter Strip

| <b>Design Point:</b>  | 1  |                               |                            |                       |  |                    |               |  |  |  |  |
|---|--|-------------------------------|----------------------------|-----------------------|--|--------------------|---------------|--|--|--|--|
| Enter Site Data For Drainage Area to be Treated by Practice                 |  |                               |                            |                       |  |                    |               |  |  |  |  |
| Catchment<br>Number   | Total Area<br>(Acres)                          | Impervious<br>Area<br>(Acres) | Percent<br>Impervious<br>% | Rv                    | WQv<br>(ft <sup>3</sup> )  | Precipitation (in) | Description   |  |  |  |  |
| 2   | 1.99   | 0.49                          | 0.25                       | 0.27                  | 1962.02  | 1.00               | Filter Strips |  |  |  |  |
| Design Elements   |  |                               |                            |                       |  |                    |               |  |  |  |  |
| Is another area based practice applied to this area?                        |  |                               | No                         | Y/N                   |  |                    |               |  |  |  |  |
| Amended Soils   | Amended Soils & Dense Turf Cover?              |                               |                            | Y/N                   |  |                    |               |  |  |  |  |
| Is area protected from compaction from heavy equipment during construction? |  |                               | Yes                        | Y/N                   |  |                    |               |  |  |  |  |
| Small Area of Impervious Area & close to source?                            |  |                               | Yes                        | Y/N                   |  |                    |               |  |  |  |  |
| Composte Ame  | ndments?                                       |                               | No                         | Y/N                   |  |                    |               |  |  |  |  |
| Boundary Spreader?  |  |                               | Yes                        | Y/N                   | Gravel Di  | el Diaphram at top |               |  |  |  |  |
| Boundary Zone   | ?  |                               | Yes                        | Y/N                   | 25 feet of level grass   |                    |               |  |  |  |  |
| Specify how sheet flow will be ensured.                                     |  |                               | level<br>spreader          |                       | level spreader shall be used for buffer slopes ranging from 3-15%  |                    |               |  |  |  |  |
| Average contributing slope  |  |                               | 1                          | %                     | 3% maximum unless a level spreader is  |                    |               |  |  |  |  |
| Slope of first 10 feet of Filter Strip                                      |  |                               | 2                          | %                     | 2% maximum   |                    |               |  |  |  |  |
| Overall Slope   |  |                               | 6                          | %                     | 8% maximum   |                    |               |  |  |  |  |
| Contributing Length of Pervious Areas (PC)                                  |  |                               | 50                         | ft                    | 150 ft maximum   |                    |               |  |  |  |  |
| Contributing Length of Impervious areas (IC)                                |  |                               | 20                         | ft                    | 75 ft maximum  |                    |               |  |  |  |  |
| Maximum PC Contributing Length for combination of PC & IC                   |  | 130                           | ft                         |                       |  |                    |               |  |  |  |  |
| Soil Group (HSG   | i)   |                               | D                          |                       |  |                    |               |  |  |  |  |
| Filter Strip Width  |  |                               | 60                         | ft                    | 50 ft minimum for slopes 0-8%<br>75 ft minimum for slopes 8-12%<br>100 ft minimum for slopes 12-15%<br>HSG C or D increase by 15-20% |                    |               |  |  |  |  |
| Are All Criteria for Filter Strips in Section 5.3.2 met?                    |  |                               | Yes                        |                       | -  |                    |               |  |  |  |  |
| Area Reduction Adjustments  |  |                               |                            |                       |  |                    |               |  |  |  |  |
|   |  | Subtract                      |                            | Acres from total Area |  |                    |               |  |  |  |  |
|   | Subtract 0.49 Acres from total Impervious Area |                               |                            |                       |  |                    |               |  |  |  |  |

# Filter Strip

| Design Point:   | 1                                 |                               |                            |                                  |  |                    |               |  |  |  |
|---|-----------------------------------|-------------------------------|----------------------------|----------------------------------|--|--------------------|---------------|--|--|--|
| Enter Site Data For Drainage Area to be Treated by Practice                 |                                   |                               |                            |                                  |  |                    |               |  |  |  |
| Catchment<br>Number   | Total Area<br>(Acres)             | Impervious<br>Area<br>(Acres) | Percent<br>Impervious<br>% | Rv                               | WQv<br>(ft <sup>3</sup> )  | Precipitation (in) | Description   |  |  |  |
| 3   | 0.95                              | 0.23                          | 0.24                       | 0.27                             | 923.84   | 1.00               | Filter Strips |  |  |  |
| Design Elements   |                                   |                               |                            |                                  |  |                    |               |  |  |  |
| Is another area based practice applied to this area?                        |                                   |                               | No                         | Y/N                              |  |                    |               |  |  |  |
| Amended Soils   | Amended Soils & Dense Turf Cover? |                               |                            | Y/N                              |  |                    |               |  |  |  |
| Is area protected from compaction from heavy equipment during construction? |                                   |                               | Yes                        | Y/N                              |  |                    |               |  |  |  |
| Small Area of Impervious Area & close to source?                            |                                   |                               | Yes                        | Y/N                              |  |                    |               |  |  |  |
| Composte Ame  | ndments?                          |                               | No                         | Y/N                              |  |                    |               |  |  |  |
| Boundary Sprea  | ider?                             |                               | Yes                        | Y/N                              | Gravel Di  | Diaphram at top    |               |  |  |  |
| Boundary Zone   | Boundary Zone?                    |                               |                            | Y/N                              | 25 feet of level grass   |                    |               |  |  |  |
| Specify how sheet flow will be ensured.                                     |                                   |                               | Gravel road                |                                  | level spreader shall be used for buffer slopes ranging from 3-15%  |                    |               |  |  |  |
| Average contributing slope  |                                   |                               | 2                          | %                                | 3% maximum unless a level spreader is used.  |                    |               |  |  |  |
| Slope of first 10 feet of Filter Strip                                      |                                   |                               | 2                          | %                                | 2% maximum   |                    |               |  |  |  |
| Overall Slope   |                                   |                               | 6                          | %                                | 8% maximum   |                    |               |  |  |  |
| Contributing Length of Pervious Areas (PC)                                  |                                   |                               | 70                         | ft                               | 150 ft maximum   |                    |               |  |  |  |
| Contributing Length of Impervious areas                                     |                                   |                               | 20                         | ft                               | 75 ft maximum  |                    |               |  |  |  |
| Maximum PC Contributing Length for combination of PC & IC                   |                                   |                               | 130                        | ft                               |  |                    |               |  |  |  |
| Soil Group (HSG   | i)                                |                               | D                          |                                  |  |                    |               |  |  |  |
| Filter Strip Width  |                                   |                               | 60                         | ft                               | 50 ft minimum for slopes 0-8%<br>75 ft minimum for slopes 8-12%<br>100 ft minimum for slopes 12-15%<br>HSG C or D increase by 15-20% |                    |               |  |  |  |
| Are All Criteria  | for filter strips                 | in Section                    |                            |                                  | •  |                    |               |  |  |  |
| 5.3.2 met?  |                                   |                               | Yes                        |                                  |  |                    |               |  |  |  |
| Area Reduction Adjustments  |                                   |                               |                            |                                  |  |                    |               |  |  |  |
|   |                                   | Subtract                      | 0.95                       | Acres from total Area            |  |                    |               |  |  |  |
| Subtract  |                                   |                               | 0.23                       | Acres from total Impervious Area |  |                    |               |  |  |  |
| TDUE  |                                   |                               |                            |                                  |  |                    |               |  |  |  |

TRUE

#### WinTR-55 Current Data Description

#### --- Identification Data ---

User: Cristobald Project: BorregoSolar\_reynolds Date: 28/01/2022 Units: English Areal Units: Acres SubTitle: PostDevelopmentV2

State: New York
County: Montgomery NRCC-B

Filename: C:\Users\CDelgado\Desktop\PostDevelopmentV2 test.w55

#### --- Sub-Area Data ---

| Name | Description | Reach  | Area(ac) | RCN | Tc    |
|------|-------------|--------|----------|-----|-------|
| SW   | south west  | Outlet | 20.99    | 80  | .11   |
| nw   | north west  | Outlet | 38.97    | 82  | 0.342 |
| ne   | north east  | Outlet | 30.05    | 82  | 0.1   |

Total area: 90.01 (ac)

#### --- Storm Data --

#### Rainfall Depth by Rainfall Return Period

| 2-Yr | 5-Yr | 10-Yr | 25-Yr | 50-Yr | 100-Yr | 1-Yr |
|------|------|-------|-------|-------|--------|------|
| (in) | (in) | (in)  | (in)  | (in)  | (in)   | (in) |
| 2.48 | 3.01 | 3.5   | 4.27  | 4.96  | 5.77   | 2.16 |

Storm Data Source: Montgomery NRCC-B County, NY (NRCS) Rainfall Distribution Type: Type NR\_B

Dimensionless Unit Hydrograph: <standard>

## BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

#### Storm Data

#### Rainfall Depth by Rainfall Return Period

| 2-Yr | 5-Yr | 10-Yr | 25-Yr | 50-Yr | 100-Yr | 1-Yr |
|------|------|-------|-------|-------|--------|------|
| (in) | (in) | (in)  | (in)  | (in)  | (in)   | (in) |
| 2.48 | 3.01 | 3.5   | 4.27  | 4.96  | 5.77   | 2.16 |

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
Rainfall Distribution Type: Type NR\_B
Dimensionless Unit Hydrograph: <standard>

# BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

#### Watershed Peak Table

| Sub-Area<br>or Reach<br>Identifier |        | ak Flow by<br>100-Yr<br>(cfs) |       | Return : | Period |      |      |
|------------------------------------|--------|-------------------------------|-------|----------|--------|------|------|
| SUBAREAS<br>sw                     | 49.73  | 106.87                        | 19.56 |          |        | <br> | <br> |
| nw                                 | 64.71  | 136.18                        | 26.54 |          |        |      |      |
| ne                                 | 79.21  | 163.97                        | 33.29 |          |        |      |      |
| REACHES                            |        |                               |       |          |        |      |      |
| OUTLET                             | 173.55 | 367.62                        | 69.92 |          |        |      |      |

OUTLET 173.55 367.62 69.92

# BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

Hydrograph Peak/Peak Time Table

|                | , , | 100-Yr          | 1-Yr<br>(cfs) | _ | Rainfall | Return | Period |
|----------------|-----|-----------------|---------------|---|----------|--------|--------|
| SUBAREAS<br>sw |     | 106.87<br>12.12 |               |   |          |        |        |
| nw             |     | 136.18<br>12.26 |               |   |          |        |        |
| ne             |     | 163.97<br>12.12 |               |   |          |        |        |
| REACHES        |     |                 |               |   |          |        |        |

# BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Summary Table

| Sub-Area<br>Identifier | Drainage<br>Area<br>(ac) | Time of<br>Concentration<br>(hr) | Curve<br>Number | Receiving<br>Reach | Sub-Area<br>Description |
|------------------------|--------------------------|----------------------------------|-----------------|--------------------|-------------------------|
| sw                     | 20.99                    | 0.110                            | 80              | Outlet             | south west              |
| nw                     | 38.97                    | 0.342                            | 82              | Outlet             | north west              |
| ne                     | 30.05                    | 0.100                            | 82              | Outlet             | north east              |

Total Area: 90.01 (ac)

# BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Time of Concentration Details

| Sub-Area<br>Identifier/  | Length     | Slope  | Mannings's<br>n | Area | Perimeter   |           |       |
|--------------------------|------------|--------|-----------------|------|-------------|-----------|-------|
| SW<br>SHALLOW            | 1110       | 0.0300 | 0.050           |      |             |           | 0.110 |
|                          |            |        |                 | Ti   | me of Conce |           | .11   |
| nw<br>SHALLOW<br>CHANNEL | 2143<br>90 |        | 0.050<br>0.012  | 0.20 | 1.00        | 5.000     | 0.337 |
|                          |            |        |                 | Ti   | me of Conce | entration | 0.342 |
| ne<br>SHALLOW            | 500        | 0.2700 | 0.050           |      |             |           | 0.017 |
|                          |            |        |                 | Ti   | me of Conce |           | 0.1   |

# BorregoSolar\_reynolds PostDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Land Use and Curve Number Details

| Sub-Area<br>Identifie |  |                | Hydrologic<br>Soil<br>Group | Sub-Area<br>Area<br>(ac)          | Curve<br>Number            |
|-----------------------|--|----------------|-----------------------------|-----------------------------------|----------------------------|
| sw                    | Gravel (w/ right-of-way) Industrial Pasture, grassland or range Woods - grass combination Total Area / Weighted Curve Number | (good<br>(fair |                             | .3<br>.2<br>18.79<br>1.7<br>20.99 |                            |
| nw                    | Gravel (w/ right-of-way) Industrial Pasture, grassland or range Woods - grass combination Total Area / Weighted Curve Number | (good<br>(fair |                             | .7<br>.8<br>2.6<br>34.87<br>38.97 | 91<br>93<br>80<br>82<br>82 |
| ne                    | Woods - grass combination  Total Area / Weighted Curve Number  | (fair          | ) D                         | 30.05<br>30.05<br>=====           | 82<br>82<br>==             |

#### WinTR-55 Current Data Description

#### --- Identification Data ---

User: Cristobald
Project: BorregoSolar\_reynolds Date: 28/01/2022 Units: English Areal Units: Acres SubTitle: PreDevelopmentV2

State: New York
County: Montgomery NRCC-B

Filename: C:\Users\CDelgado\Desktop\PreDevelopmentV2\_test.w55

#### --- Sub-Area Data ---

| Name | Description | Reach  | Area(ac) | RCN | Tc    |  |
|------|-------------|--------|----------|-----|-------|--|
| SW   | south west  | Outlet | 20.99    | 80  | .11   |  |
| nw   | north west  | Outlet | 38.97    | 82  | 0.337 |  |
| ne   | north east  | Outlet | 30.05    | 82  | 0.1   |  |

Total area: 90.01 (ac)

#### --- Storm Data --

#### Rainfall Depth by Rainfall Return Period

| 2-Yr | 5-Yr | 10-Yr | 25-Yr | 50-Yr | 100-Yr | 1-Yr |
|------|------|-------|-------|-------|--------|------|
| (in) | (in) | (in)  | (in)  | (in)  | (in)   | (in) |
| 2.48 | 3.01 | 3.5   | 4.27  | 4.96  | 5.77   | 2.16 |

Storm Data Source: Montgomery NRCC-B County, NY (NRCS) Rainfall Distribution Type: Type NR\_B

Dimensionless Unit Hydrograph: <standard>

## BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

#### Storm Data

#### Rainfall Depth by Rainfall Return Period

| 2-Yr | 5-Yr | 10-Yr | 25-Yr | 50-Yr | 100-Yr | 1-Yr |
|------|------|-------|-------|-------|--------|------|
| (in) | (in) | (in)  | (in)  | (in)  | (in)   | (in) |
| 2.48 | 3.01 | 3.5   | 4.27  | 4.96  | 5.77   | 2.16 |

Storm Data Source: Montgomery NRCC-B County, NY (NRCS)
Rainfall Distribution Type: Type NR\_B
Dimensionless Unit Hydrograph: <standard>

# BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

#### Watershed Peak Table

| Sub-Area<br>or Reach<br>Identifier | 10-Yr  |        | 1-Yr  | Return | Period |  |  |
|------------------------------------|--------|--------|-------|--------|--------|--|--|
| SUBAREAS<br>sw                     | 49.73  | 106.87 | 19.56 |        |        |  |  |
| nw                                 | 64.71  | 136.18 | 26.54 |        |        |  |  |
| ne                                 | 79.21  | 163.97 | 33.29 |        |        |  |  |
| REACHES                            |        |        |       |        |        |  |  |
| OUTLET                             | 173.55 | 367.62 | 69.92 |        |        |  |  |

# BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

Hydrograph Peak/Peak Time Table

| or Reach       | 10-Yr<br>(cfs) | 100-Yr          | 1-Yr<br>(cfs)  | (hr) by Rainfall Return Period |  |
|----------------|----------------|-----------------|----------------|--------------------------------|--|
| SUBAREAS<br>sw | 49.73<br>12.13 | 106.87<br>12.12 |                |                                |  |
| nw             |                | 136.18<br>12.26 | 26.54<br>12.26 |                                |  |
| ne             |                | 163.97<br>12.12 |                |                                |  |
| REACHES        |                |                 |                |                                |  |
| OUTLET         | 173.55         | 367.62          | 69.92          |                                |  |

# BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Summary Table

| Sub-Area<br>Identifier | Drainage<br>Area<br>(ac) | Time of<br>Concentration<br>(hr) | Curve<br>Number | Receiving<br>Reach | Sub-Area<br>Description |
|------------------------|--------------------------|----------------------------------|-----------------|--------------------|-------------------------|
| sw                     | 20.99                    | 0.110                            | 80              | Outlet             | south west              |
| nw                     | 38.97                    | 0.337                            | 82              | Outlet             | north west              |
| ne                     | 30.05                    | 0.100                            | 82              | Outlet             | north east              |

Total Area: 90.01 (ac)

# BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Time of Concentration Details

| Sub-Area<br>Identifier/ | _    |        |       | Area | Perimete  | r Velocity<br>(ft/sec) |       |
|-------------------------|------|--------|-------|------|-----------|------------------------|-------|
| sw<br>SHALLOW           | 1110 | 0.0300 | 0.050 | Ti   | me of Con | centration             | 0.110 |
| nw<br>SHALLOW           | 2143 | 0.0120 | 0.050 | Ti   | me of Con | centration             | 0.337 |
| ne<br>SHALLOW           | 500  | 0.2700 | 0.050 | Ti   | me of Con | centration             | 0.017 |

# BorregoSolar\_reynolds PreDevelopmentV2 Montgomery NRCC-B County, New York

#### Sub-Area Land Use and Curve Number Details

| Sub-Area<br>Identifie |  |                | Hydrologic<br>Soil<br>Group | Sub-Area<br>Area<br>(ac) | Curve<br>Number |
|-----------------------|--|----------------|-----------------------------|--------------------------|-----------------|
| sw                    | Pasture, grassland or range<br>Woods - grass combination |                | ) D<br>) D                  | 19.19                    | 80<br>82        |
|                       | Total Area / Weighted Curve Number                       |                |                             | 20.99                    | 80              |
| nw                    | Pasture, grassland or range<br>Woods - grass combination | (good<br>(fair | ,                           | .9<br>38.07              | 80<br>82        |
|                       | Total Area / Weighted Curve Number                       |                |                             | 38.97<br>====            | 82<br>==        |
| ne                    | Woods - grass combination                                | (fair          | ) D                         | 30.05                    | 82              |
|                       | Total Area / Weighted Curve Number                       |                |                             | 30.05                    | 82<br>==        |

# Appendix G

**Construction Duration Inspection Form** 

#### 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.

# CONSTRUCTION DURATION INSPECTIONS Page 1 of \_\_\_\_\_ SITE PLAN/SKETCH **Inspector (print name) Date of Inspection Qualified Inspector (print name) Qualified Inspector Signature** The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

### **Maintaining Water Quality**

| Ye   | s No | NA   |
|------|------|--|
| []   | []   | [] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?   |
| []   | []   | [] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?   |
| ٢1   | ٢٦   | [] All disturbance is within the limits of the approved plans.   |
|      |      | [] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?   |
| Ho   | usek | keeping  |
|      |      | neral Site Conditions  |
|      |      | NA   |
| []   | []   | <ul><li>[] Is construction site litter, debris and spoils appropriately managed?</li><li>[] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?</li></ul>   |
|      |      | [ ] Is construction impacting the adjacent property? [ ] Is dust adequately controlled?  |
| 2.   | Ten  | nporary Stream Crossing  |
| Ye   | s No | NA .   |
| []   | []   | <ul> <li>[] Maximum diameter pipes necessary to span creek without dredging are installed.</li> <li>[] Installed non-woven geotextile fabric beneath approaches.</li> <li>[] Is fill composed of aggregate (no earth or soil)?</li> <li>[] Rock on approaches is clean enough to remove mud from vehicles &amp; prevent sediment from entering stream during high flow.</li> </ul> |
|      |      | bilized Construction Access 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?  |
| Ru   | noff | Control Practices  |
|      |      | cavation Dewatering NA   |
| 1 e: |      | [] 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.  |

## **Runoff Control Practices (continued)**

| 2. Flow Spreader  |   |
|---|---|
| Yes No NA   |   |
| <ul> <li>[] [] Installed per plan.</li> <li>[] [] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.</li> <li>[] [] Flow sheets out of level spreader without erosion on downstream edge.</li> </ul>  | • |
| 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  |   |
| 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  |   |
| Silt Fence and Linear Barriers  |   |
| Yes No NA   |   |
| <ul> <li>[] [] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).</li> <li>[] [] Joints constructed by wrapping the two ends together for continuous support.</li> <li>[] [] Fabric buried 6 inches minimum.</li> <li>[] [] Posts are stable, fabric is tight and without rips or frayed areas.</li> </ul> |   |
| Sediment accumulation is% of design capacity.   |   |

### CONSTRUCTION DURATION INSPECTIONS

Page 4 of \_\_\_\_\_

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

| 2.         | Sto          | rm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock of   |
|------------|--------------|--|
|            | Mai          | nufactured practices)  |
| Ye         | s 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.  |
| Ϊĺ         | Ϊĺ           | [] 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.  |
| ۲1         | []           | [] Posts are stable, fabric is tight and without rips or frayed areas.   |
|            |              | [] Manufactured insert fabric is free of tears and punctures.  |
|            |              | [] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.   |
|            |              | nt accumulation% of design capacity.   |
| 3.         | Ten          | nporary Sediment Trap  |
| Ye         | s No         | NA   |
| []         | []           | [] Outlet structure is constructed per the approved plan or drawing.   |
| []         | []           | [] Geotextile fabric has been placed beneath rock fill.  |
|            |              | [] Sediment trap slopes and disturbed areas are stabilized.  |
|            |              | nt accumulation is% of design capacity.  |
|            |              | nporary Sediment Basin   |
|            | s No         |  |
|            |              | [] 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 basin dewatering pool is dewatering at appropriate rate.   |
| Sec        | dime         | nt accumulation is% of design capacity.  |
| <b>N</b> T |              |  |
| <u>No</u>  | <u>ite</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. All practices shall be maintained in accordance with their respective standards. |
|            |              | Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.  |
|            |              |  |

# Appendix H

**Notice of Termination** 

## New York State Department of Environmental Conservation

### Division of Water 625 Broadway, 4th Floor

**Albany, New York 12233-3505** 

\*(NOTE: Submit completed form to address above)\*

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

| Please indicate your permit identification number: NYR  |  |  |  |  |
|---|--|--|--|--|
| I. Owner or Operator Information  |  |  |  |  |
| 1. Owner/Operator Name:   |  |  |  |  |
| 2. Street Address:  |  |  |  |  |
| 3. City/State/Zip:  |  |  |  |  |
| 4. Contact Person: 4a   | a.Telephone:   |  |  |  |
| 4b. Contact Person E-Mail:  |  |  |  |  |
| II. Project Site Information  |  |  |  |  |
| 5. Project/Site Name:   |  |  |  |  |
| 6. Street Address:  |  |  |  |  |
| 7. City/Zip:  |  |  |  |  |
| 8. County:  |  |  |  |  |
| III. Reason for Termination   |  |  |  |  |
| 9a. □ All disturbed areas have achieved final stabilization in accorda SWPPP. *Date final stabilization completed (month/year):       | ance with the general permit and                         |  |  |  |
| 9b.   Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR     |  |  |  |  |
| 9c. □ Other (Explain on Page 2)   |  |  |  |  |
| IV. Final Site Information:   |  |  |  |  |
| 10a. Did this construction activity require the development of a SWF stormwater management practices? $\Box$ yes $\Box$ no (If no, go | PPP that includes post-construction of to question 10f.) |  |  |  |
| 10b. Have all post-construction stormwater management practices i constructed? □ yes □ no (If no, explain on Page 2)                  | included in the final SWPPP been                         |  |  |  |
| 10c. Identify the entity responsible for long-term operation and main   | ntenance 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 10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s): □ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality. □ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s). □ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record. □ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan. 10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? (acres) 11. Is this project subject to the requirements of a regulated, traditional land use control MS4? (If Yes, complete section VI - "MS4 Acceptance" statement V. Additional Information/Explanation: (Use this section to answer questions 9c. and 10b., if applicable) VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage) I have determined that it is acceptable for the owner or operator of the construction project identified in

Date:

question 5 to submit the Notice of Termination at this time.

Printed Name:
Title/Position:

Signature:

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

VII. Qualified Inspector Certification - Final Stabilization:

| I hereby certify that all disturbed areas have achieved final stabilization as of the general permit, and that all temporary, structural erosion and sedim been removed. Furthermore, I understand that certifying false, incorrect of violation of the referenced permit and the laws of the State of New York a criminal, civil and/or administrative proceedings.   | nent control measures have<br>or inaccurate information is a |  |  |  |  |
|--|--|--|--|--|--|
| Printed Name:  |  |  |  |  |  |
| Title/Position:  |  |  |  |  |  |
| Signature:   | Date:  |  |  |  |  |
| VIII. Qualified Inspector Certification - Post-construction Stormwat   | er Management Practice(s):                                   |  |  |  |  |
| 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:  |  |  |  |  |
| IX. Owner or Operator Certification  |  |  |  |  |  |
| 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 naccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. |  |  |  |  |  |
| Printed Name:  |  |  |  |  |  |
| Title/Position:  |  |  |  |  |  |
| Signature:   | Date:  |  |  |  |  |

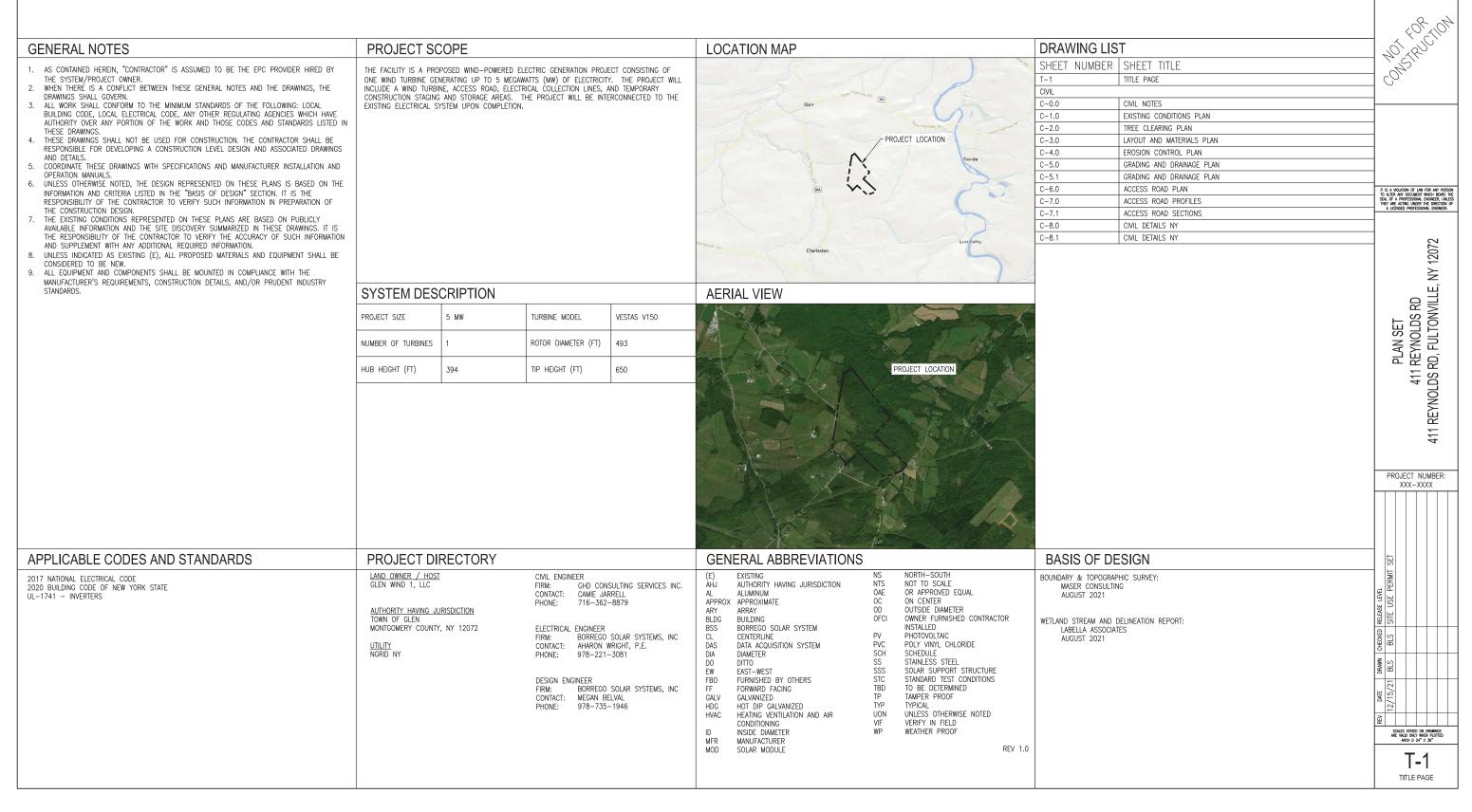
(NYS DEC Notice of Termination - January 2015)

# Appendix I

**Project Drawings (11 x 17)** 

# SITE USE PERMIT SET

## 411 REYNOLDS RD, FULTONVILLE, NY 12072 5.0MW WIND PROJECT



#### APPROVALS

- 1. SITE PLAN APPROVAL DATED MONTH DAY, 20\_\_
- 2. SEQR NEGATIVE DECLARATION DATED MONTH DAY, 20\_\_

#### GENERAL NOTES

- EXISTING CONDITIONS SURVEY INFORMATION WAS PREPARED BY COLLIERS ENGINEERING & DESIGN PERFORMED ON 08/09/21. BASIS OF BEARING IS NEW YORK STATE PLANE COORDINATE SYSTEM EASTZONE, CONTROL WAS ESTABLISHED USING NYSNET. THE HORIZONTAL DATUMIS RELATIVE TO NAD83. THE VERTICAL POSITION OF THE HEREIN SURVEY IS BASED ON THE NYSNET RTKGPS NETWORK AND IS SUBJECT TO FURTHER ADJUSTMENT TO ANY LOCAL NGSBENCHMARKS. THE VERTICAL DATUM IS RELATIVE TO NAVD
- THERE IS NO GUARANTEE THAT ALL THE EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT LIMITS ARE ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK. A DIG SAFELY NEW YORK TICKET NUMBER INDICATING ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED SHALL BE OBTAINED PRIOR TO COMMENCING WORK. CONTACT "DIG SAFELY NEW YORK" AT 1-800-962-7962 AND PROVIDE 72 HOURS NOTICE TO RECEIVE A TICKET NUMBER.
- THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE ELECTRIC UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION
- THE SUBCONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT TO THE CONTRACTOR.
- TOWN APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES.
- SUBCONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE CONTRACTOR/CEOR FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
- AREAS USED AS FOR PARKING DURING CONSTRUCTION SHALL BE RESTORED TO PRE—CONSTRUCTION CONDITIONS INCLUDING, BUT NOT LIMITED TO, REGRADING, LOAMING AND SEEDING. IN NO CASE SHALL PARKING AREAS, LAYDOWN AREAS, CONSTRUCTION TRAILERS, AND PORTABLE TOILETS BE LOCATED WITHIN A WETLAND RESOURCE AREA AND/OR ANY BUFFER ZONES.
- WIND TURBINE SHALL BE WHITE IN COLOR.
- 10. ALL EQUIPMENT SHALL MEET STANDARDS OF THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

#### SITE PREPARATION NOTES

- NO TOPSOIL WILL BE ALLOWED TO LEAVE THE PROPERTY. EXCESS TOPSOIL SHALL BE DISTRIBUTED INTO A THIN LAYER ON LAND IMMEDIATELY ADJACENT TO WHERE THE TOPSOIL ORIGINATED.
- TREE CLEARING AND STUMP REMOVAL SHALL BE IN ACCORDANCE WITH APPROVED LOCAL, STATE, AND FEDERAL PERMITS. TREES TO BE REMOVED SHALL BE MARKED BY THE CONTRACTOR'S PROJECT MANAGER OR SITE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORK ON-SITE.
- SEASONAL TREE CLEARING RESTRICTIONS MAY BE REQUIRED FOR ENDANGERED SPECIES PROTECTION. THE CONTRACTOR SHALL REFER TO THE TREE CLEARING PLAN FOR ANY
- ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE SUBCONTRACTOR(S)
- THE SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR COORDINATING THEIR EFFORTS WITH
- THE SUBCONTRACTOR(S) SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.

#### EROSION AND SEDIMENT CONTROL MEASURES

- 1. A SPDES PERMIT SHALL BE IN PLACE PRIOR TO COMMENCING ANY EARTH DISTURBANCE.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
- SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE TOWN OF GLEN OR THEIR REPRESENTATIVE AND THE CONTRACTOR/CEOR BEFORE CONSTRUCTION BEGINS.
- STRAW BALES AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH. FREE OF NOXIOUS WEEDS OR WOODY STEMS. AND SHALL BE DRY WHEN INSTALLED.
- DISTURBED AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. ALL ERODABLE/BARE AREAS SHALL BE BLANKETED OR SEEDED AND MULCHED WITHIN 7 DAYS WITH TEMPORARY EROSION CONTROL SEEDING.
- STABILIZE SLOPES GREATER THAN 3:1 (HORIZONTAL: VERTICAL) WITH SEED, SECURED GEOTEXTILE FABRIC, SPRAYED COMPOST BLANKET, OR RIP-RAP AS REQUIRED TO PREVENT EROSION DURING CONSTRUCTION.
- SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.
- CLEAN OUT PROJECT DRAINAGE FEATURES AND STRUCTURES (I.E. CULVERTS, BASINS, SWALES, ETC.) AFTER COMPLETION OF CONSTRUCTION.
- SEDIMENT COLLECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED ON—SITE AS BACKFILL OR GRADING AS APPROPRIATED OR REMOVED FROM SITE ALONG WITH ESC MEASURES WHEN SITE STABILIZATION IS ACHIEVED.
- AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, THE SUBCONTRACTOR(S) SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AT THE CONTRACTOR/CEOR DIRECTION.
- AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE SUBCONTRACTOR(S) SHALL GRADE AND SEED AREA OF TEMPORARY EROSION CONTROL
- 12. DAMAGED OR DETERIORATED EROSION AND SEDIMENT CONTROL ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/CEOR.

- 13. THE TRAINED CONTRACTOR SHALL INSPECT FROSION AND SEDIMENT CONTROL PRACTICES AND POLLUTION PREVENTION MEASURES BEING IMPLEMENTED WITHIN THE ACTIVE WORK AREA DAILY TO ENSURE THAT THEY ARE BEING MAINTAINED IN EFFECTIVE OPERATING CONDITION AT ALL TIMES. IF DEFICIENCIES ARE IDENTIFIED, THE CONTRACTOR SHALL BEGIN IMPLEMENTING CORRECTIVE ACTIONS WITHIN ONE BUSINESS DAY AND SHALL COMPLETE THE CORRECTIVE ACTIONS IN A REASONABLE TIME FRAME.
- 14. THE OWNER/OPERATOR SHALL HAVE THE QUALIFIED INSPECTOR CONDUCT INSPECTIONS ONCE EVERY SEVEN CALENDAR DAYS FOR SITE DISTURBANCES LESS THAN FIVE ACRES FOR SITES WHICH HAVE RECEIVED AUTHORIZATION FROM NYSDEC TO DISTURB FIVE ACRES OR MORE, THE QUALIFIED INSPECTOR SHALL CONDUCT INSPECTIONS TWICE EVERY SEVEN CALENDAR DAYS WITH NO LESS THAN TWO DAYS SEPARATING THE INSPECTIONS.
- 15. PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE. REFER TO DETAILS.
- 16. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE DISCHARGED TO AN APPROPRIATE SEDIMENT TRAPPING DEVICE.
- 17. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR/CEOR.
- 18. GRAVEL ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY.
- 19. NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. NO RE-FUELING SHALL OCCUR WITHIN 100 FEET OF ANY WETLAND RESOURCE AREA AND 200 FEET FROM RIVERFRONT. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- THE COST OF REPAIRING EROSION CONTROL MEASURES OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
- FROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
- 22. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DUST FROM FORMING.
- 23. EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS IS INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO COMPLY WITH THE PROJECT'S SPDES PERMIT AND STORMWATER POLLUTION PREVENTION PLAN.
- 24. A CONCRETE WASH OUT AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE

#### LAYOUT AND MATERIAL NOTES

**GENERAL CIVIL NOTES** 

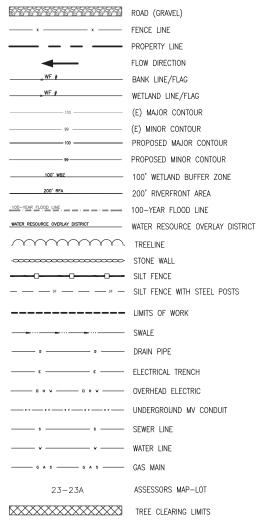
- THE CONTRACTOR SHALL HAVE SITE FEATURES STAKED OUT BY A LICENSED LAND SURVEYOR PRIOR TO ANY INSTALLATION OF RACKING OR TRENCHES.
- EXCESS TRENCH MATERIAL SHALL BE PLACED ON THE SIDES OF THE TRENCH AND PLACED AT OR NEAR THE SAME LOCATION AS WHERE EXCAVATED. AFTER TRENCH HAS BEEN BACKFILLED TOPSOIL REMOVED SHALL BE PLACED ON TOP AND LIGHTLY COMPACTED.
- SUBCONTRACTOR SHALL INSTALL CONDUITS FOR ALL ELECTRIC CONDUIT CROSSINGS PRIOR TO INSTALLATION OF ROADWAY SUBBASE.

- WHERE PROPOSED GRADES MEET EXISTING GRADES, SUBCONTRACTOR(S) SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ALLOWED.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL TURBINE FOUNDATIONS, PUBLIC ROADWAYS, AND WORK AREAS,
- THE ELEVATIONS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED GUIDANCE AND SHOULD BE ADJUSTED TO FIT ACTUAL FIELD CONDITIONS DURING CONSTRUCTION. THE CONTRACTOR SHALL USE JUDGEMENT WHEN ESTABLISHING CONSTRUCTION GRADES AND
- THE FINISHED SURFACE OF CRANE PAD SHALL NOT SLOPE MORE THAN 1% IN ANY DIRECTION. THE CRANE PAD SHALL BE CONSTRUCTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL FIELD VERIFY THE LENGTHS OF ALL PIPE CULVERTS TO BE REMOVED AND INSTALLED PRIOR TO ORDERING THE PIPE.
- THE CONTRACTOR SHALL BE REQUIRED TO RELOCATE OR TO REMOVE AND RE-INSTALL ALL ROAD SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. ALL OTHER EXISTING ROW MARKERS AND/OR PROPERTY PINS SHALL BE MAINTAINED OR REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH NEW YORK LAW.

NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR AGRICULTURAL MITIGATION FOR WIND POWER PROJECTS

- THE FOLLOWING GUIDELINES SHALL APPLY TO CONSTRUCTION AREAS FOR WIND POWER CONSTRUCTION PROJECTS IMPACTING AGRICULTURAL LAND, THE PROJECT SPONSOR SHALL COORDINATE WITH THE NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS (AG. AND MARKETS) TO DEVELOP AN APPROPRIATE SCHEDULE FOR INSPECTIONS TO ÀSSURE THAT THE GOALS OF THESE GUIDELINES ARE BEING MET. THE PROJECT SPONSOR SHALL HIRE AN ENVIRONMENTAL MONITOR TO OVERSEE THE CONSTRUCTION AND MESTORATION IN AGRICULTURAL FIELDS. THE ENVIRONMENTAL MONITOR SHALL BE ON SITE WHENEVER CONSTRUCTION OR RESTORATION WORK IS OCCURRING ON AGRICULTURAL LAND. THE ENVIRONMENTAL MONITOR SHALL MAINTAIN REGULAR CONTACT WITH THE AFFECTED FARMERS AND AG. AND MARKETS CONCERNING FARM RESOURCES AND MANAGEMENT MATTERS PERTINENT TO THE AGRICULTURAL OPERATIONS AND THE SITE—SPECIFIC IMPLEMENTATION OF THE CONSTRUCTION AND RESTORATION GUIDELINES
- ALL AGRICULTRUAL AREAS SHALL BE RESTORED IN ACCORDANCE WITH DEPARTMENT OF AGRICULTURE AND MARKETS GUIDELINES FOR WIND ENGERGY PROJECTS.

**ABBREVIATIONS** RITHMINOUS BEST MANAGEMENT PRACTICE BVW BORDERING VEGETATED WETLANDS CB CONCRETE BOLIND CONCRET CMP CPP CORRUGATED METAL PIPE CORRUGATED PLASTIC PIPE DIP DUCTILE IRON PIPE DRAIN MANHOLE ECB FES EROSION CONTROL BARRIER FLARED FND SECTION FIRE HYDRANT FND FOUND GAS GATE HDPF HIGH-DENSITY POLYETHYLENE HEADWALL HW ISOLATED LANDS SUBJECT TO FLOODING ¢08-IRON PIPE ISW ISOLATED WETLANDS (FEDERAL JURISDICTION) , chicklich LANDSCAPED AREA LOW LIMIT OF WORK N/F NOW OR FORMERLY NOT TO SCALE OCS OHW OUTLET CONTROL STRUCTURE OVERHEAD WIRE REINFORCED CONCRETE PIPE RFT RETAINING ROW RIGHT-OF-WAY STONE BOUND TELEPHONE CABLE TYPICAL UP LITILITY POLE WG WATER GATE RFV 1.1 IT IS A VIOLATION OF LAW FOR ANY PERSO TO ALTER ANY DOCUMENT WHICH BEARS TH SEAL OF A PROFESSIONAL ENGINEER, UNLES THEY ARE ACTING UNDER THE DIRECTION O LEGEND



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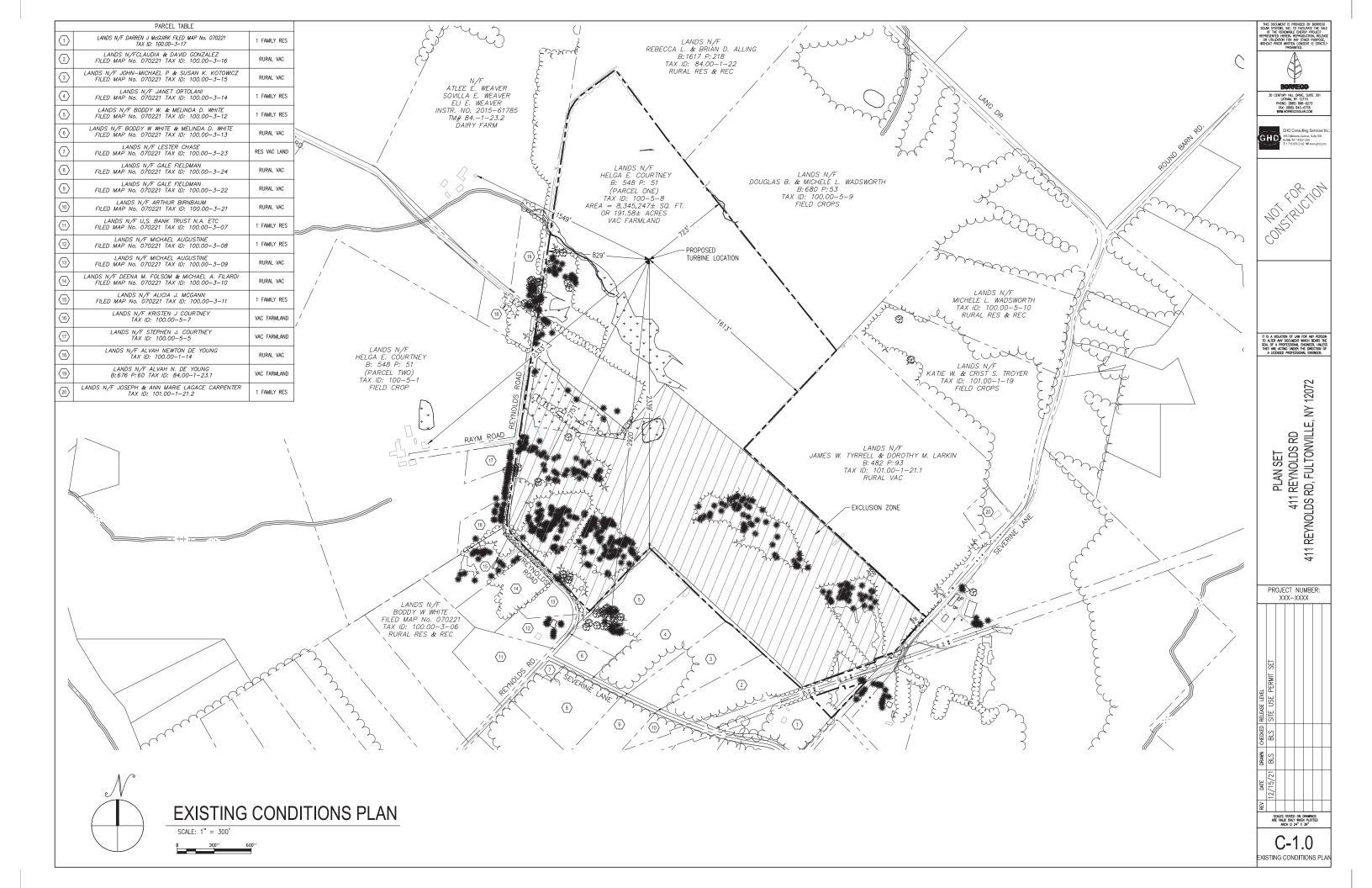
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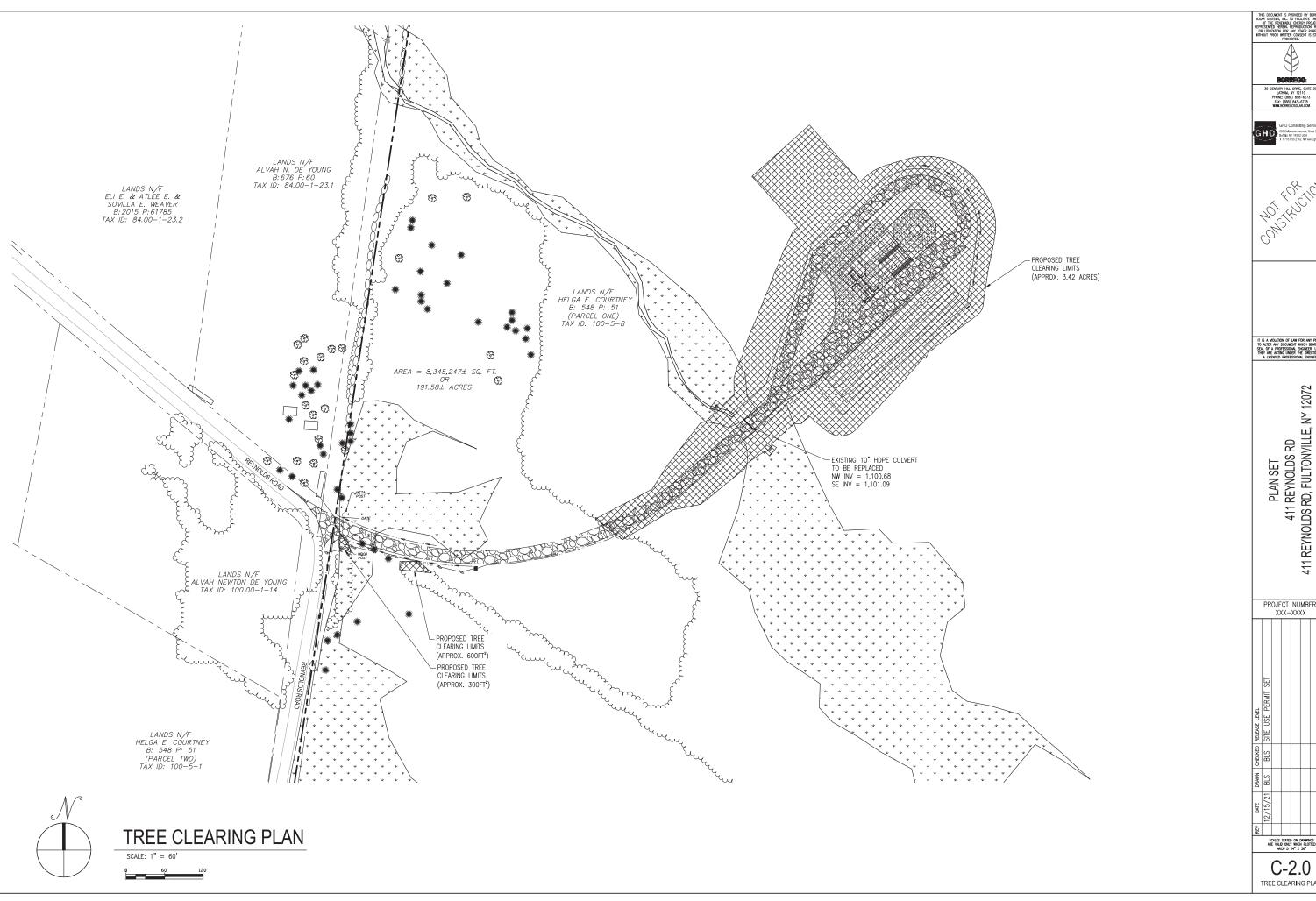
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PLAN SET





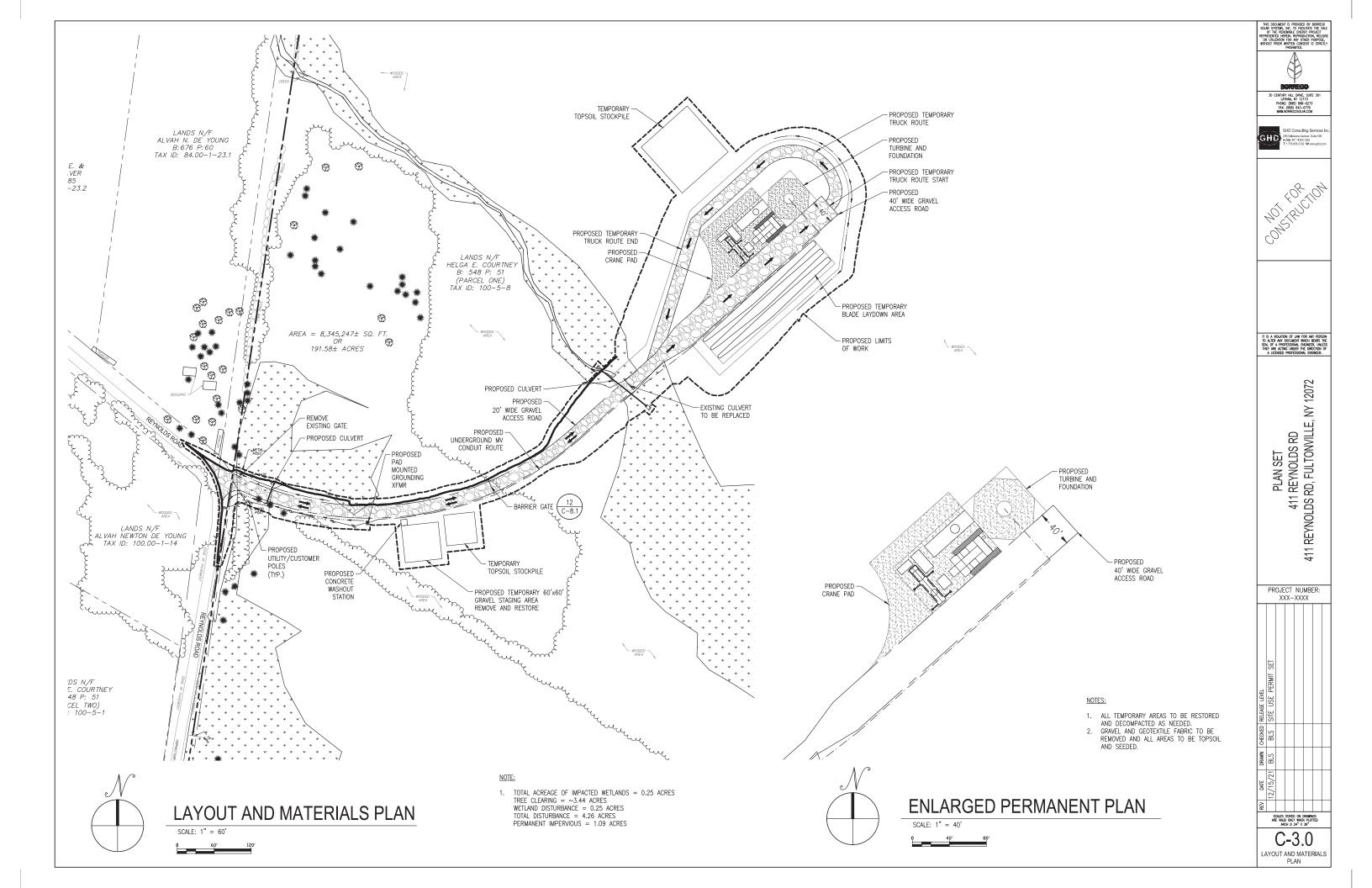


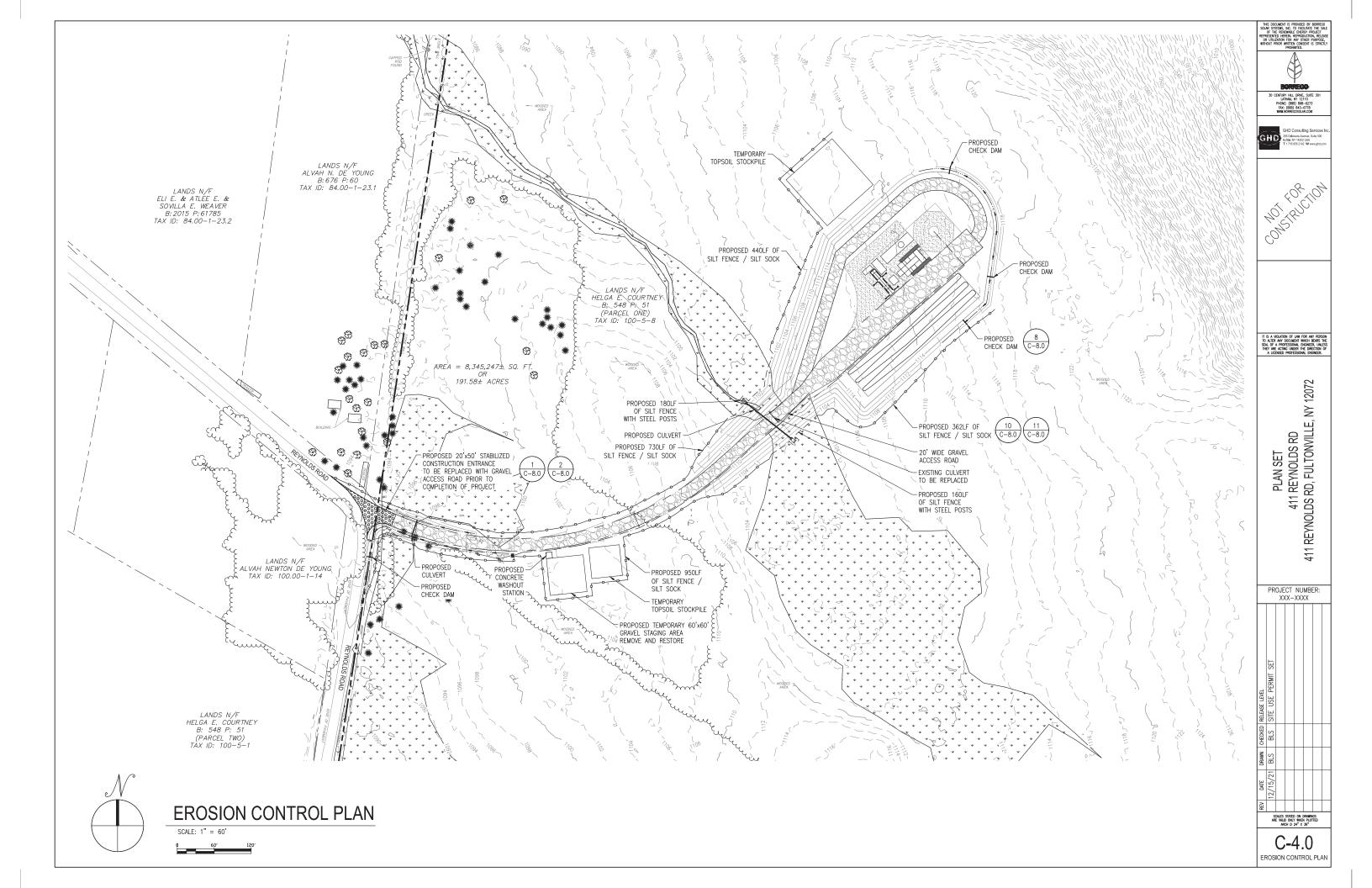
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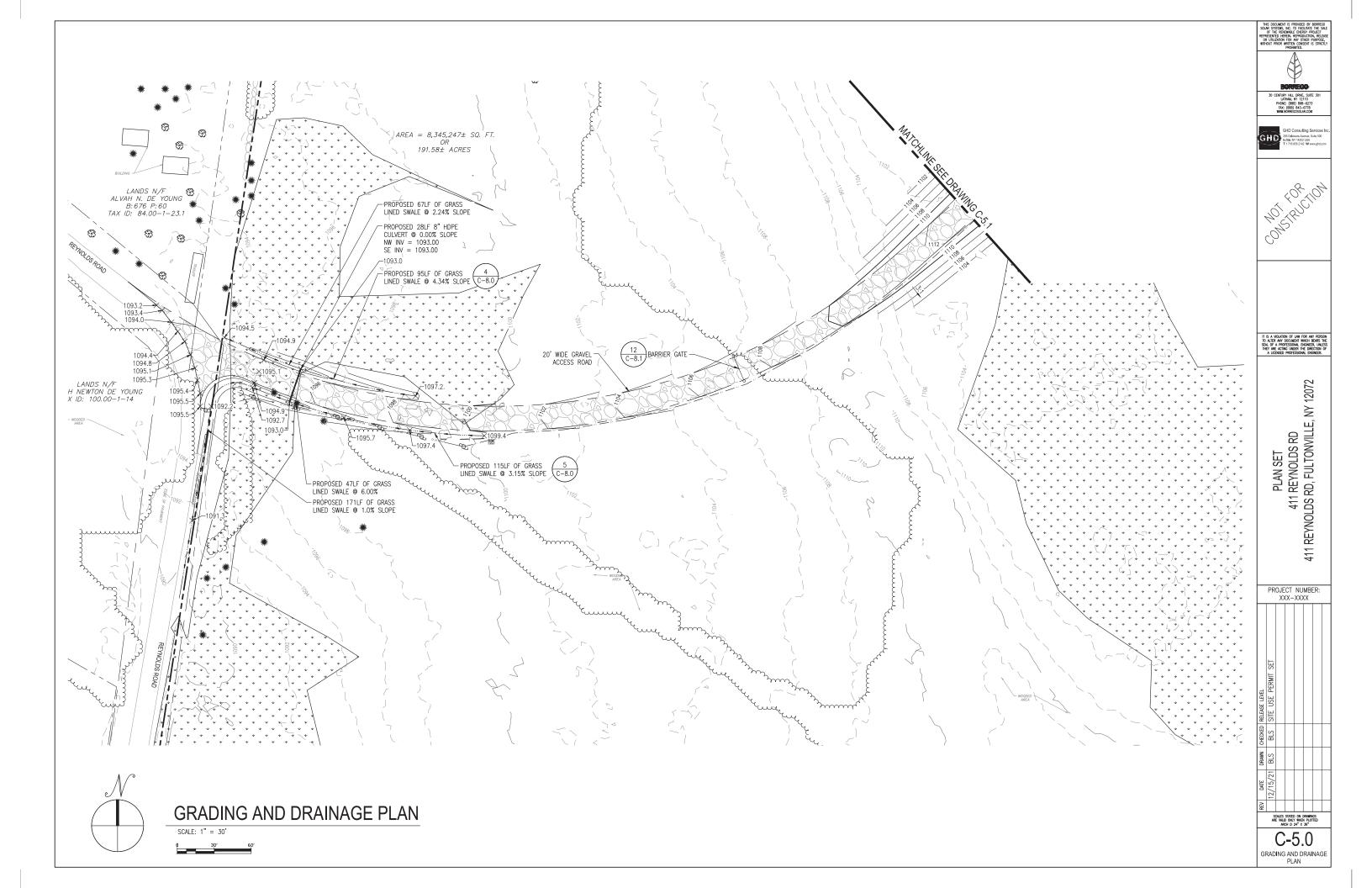
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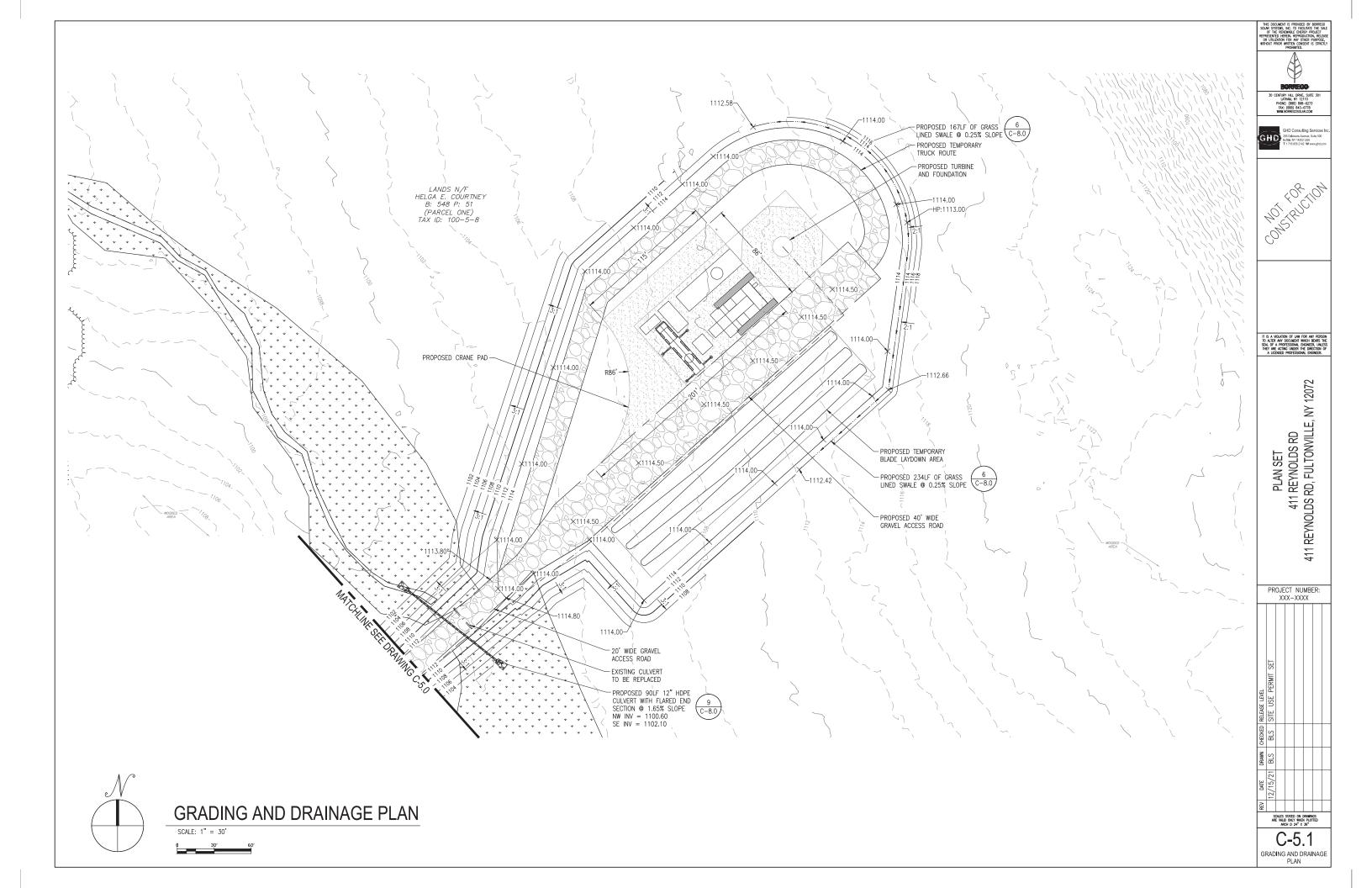


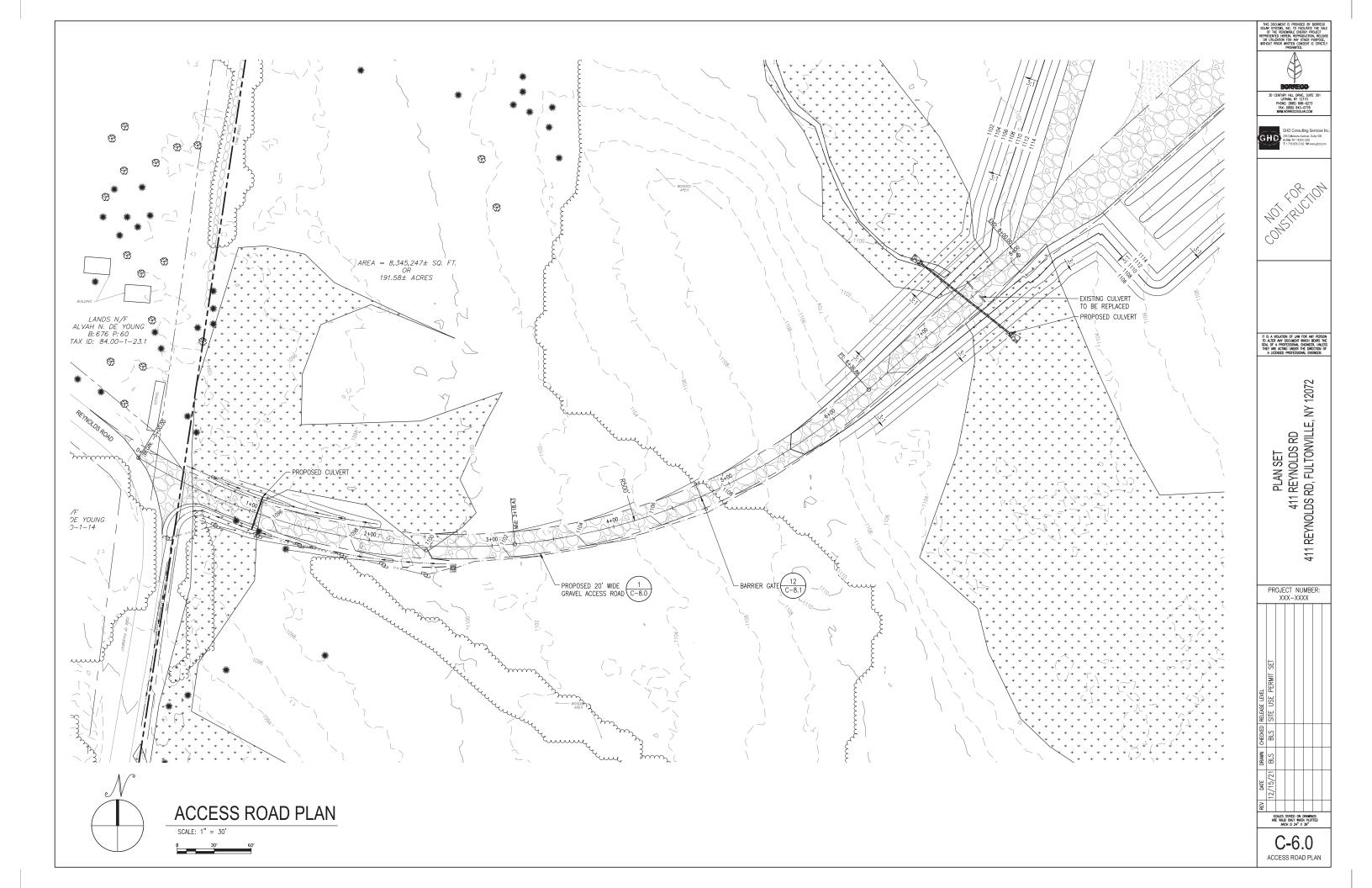
C-2.0 TREE CLEARING PLAN

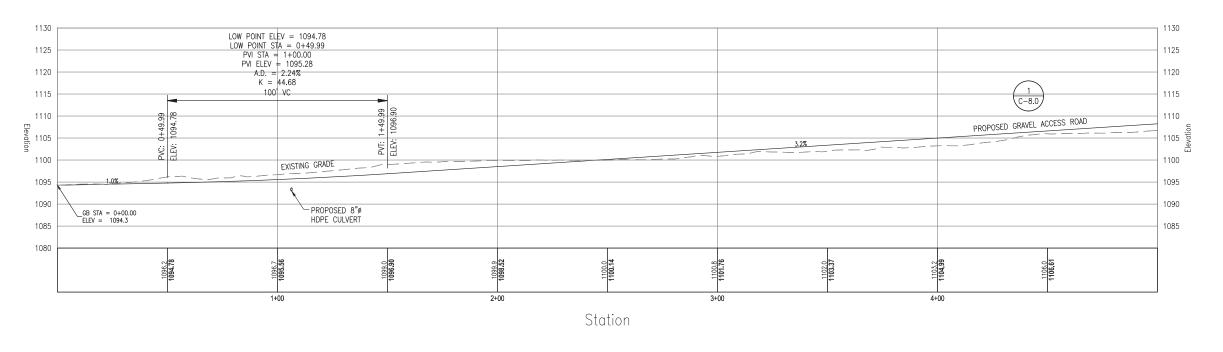






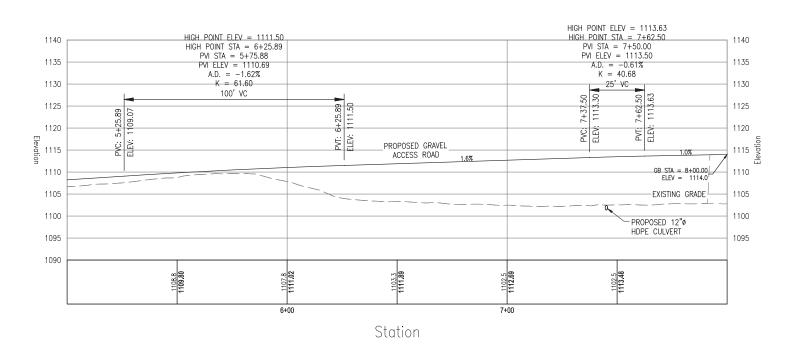






#### PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'



## ACCESS ROAD PROFILES

## PROPOSED GRAVEL ACCESS ROAD PROFILE

SCALE: H: 1"=20' V: 1"=10'

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GHD Consulting Services

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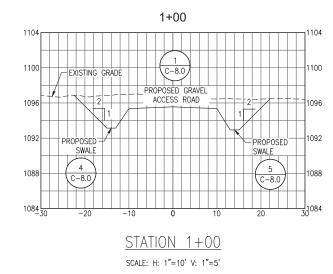
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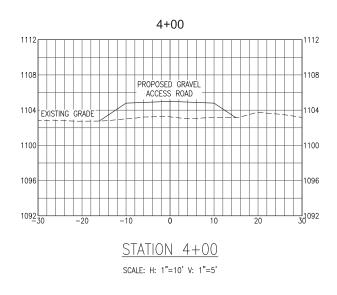
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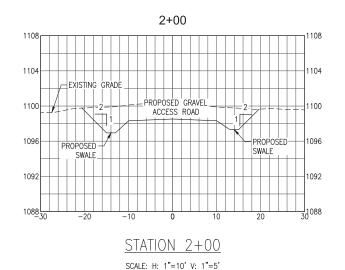
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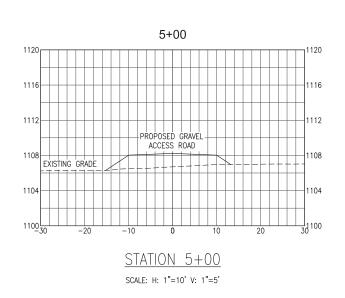
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| CHECKED                     | STB                 |        |        |      |        |           |   |
| DRAWN                       | BLS                 |        |        |      |        |           |   |
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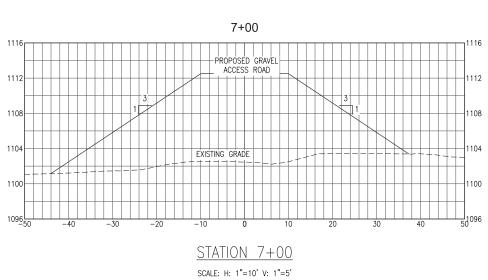
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ACCESS ROAD PROFILES

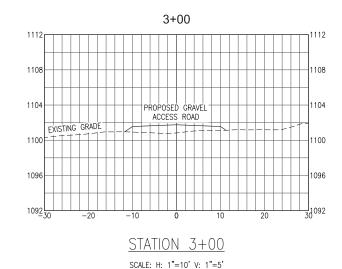


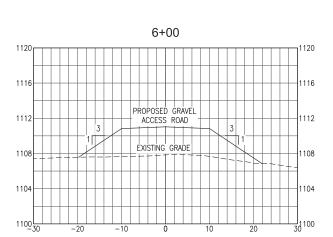












STATION 6+00 SCALE: H: 1"=10' V: 1"=5'



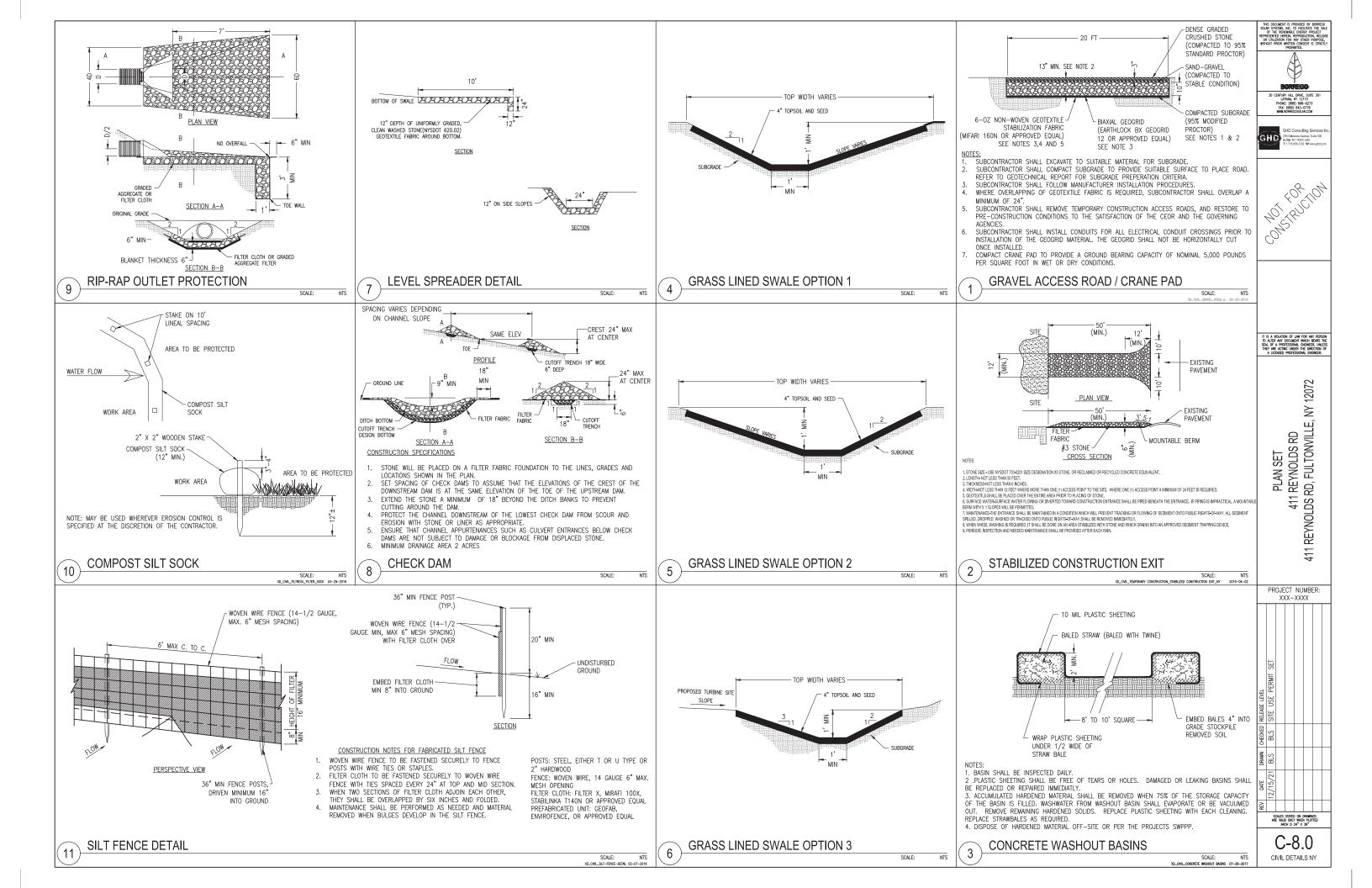


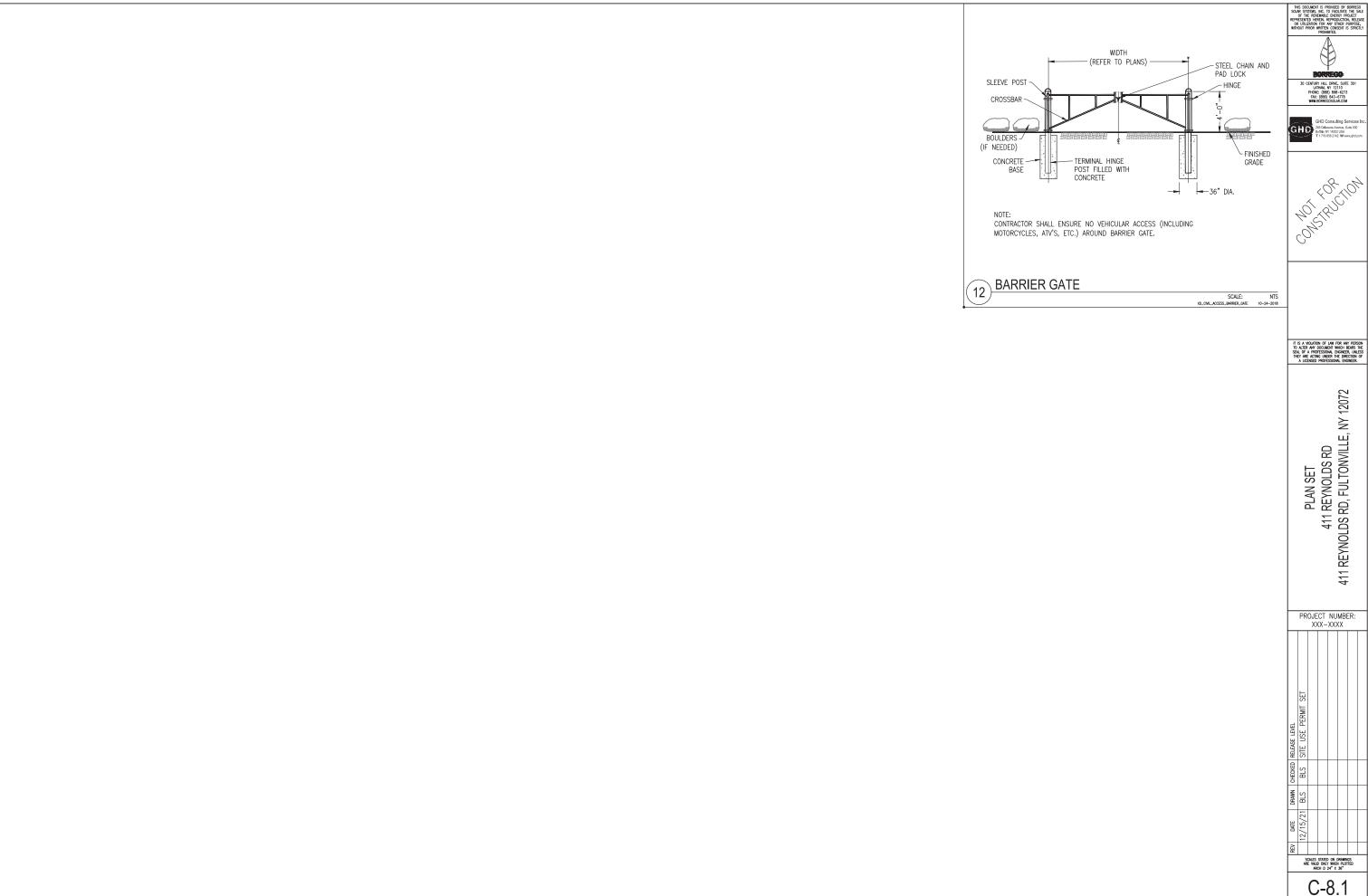


PLAN SET 411 REYNOLDS RD 11 REYNOLDS RD, FULTONVILLE, NY 12072



C-7.1
ACCESS ROAD SECTIONS





C-8.1 CIVIL DETAILS NY

