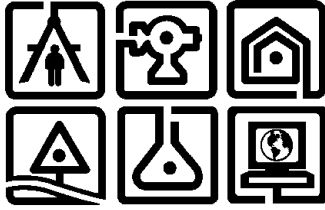


March 24, 2023



Erosion and Sediment Control
Stormwater Pollution Prevention Plan
(ESC SWPPP) for
Lansing Community Solar Project, LLC.
Lansingville Road

Town of Lansing
Tompkins County, New York

Prepared for:
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Architecture, Landscape Architecture & Geology, D.P.C.

**EROSION AND SEDIMENT CONTROL PLAN
LANSING COMMUNITY SOLAR PROJECT, LLC.
LANSINGVILLE ROAD**

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- D. Threatened and Endangered Species Correspondence
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1.0 CERTIFICATIONS

1.1 Contractor

All Contractors and Subcontractors who perform earth disturbance on the project site shall sign and date a copy of the following certification statement before undertaking any construction activity at the project site:

"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."

CONTRACTOR:

Company _____

Name/Title/Date _____

SUBCONTRACTOR:

Company _____

Name/Title/Date _____

SUBCONTRACTOR:

Company _____

Name/Title/Date _____

If additional Contractors/Subcontractors must sign the *Stormwater Pollution Prevention Plan (SWPPP)*, please continue on the back of this page.

1.2 Contractor Responsibilities

Prior to the commencement of construction activity, the Contractor(s) and Subcontractor(s) that shall be responsible for installing, constructing, repairing, inspecting and maintaining the erosion and sediment control measures included in the be identified.

The following chart shall be filled out prior to commencement of construction by Owner/Operator.

<u>Task:</u>	<u>Responsible Contractor:</u>
Installing erosion and sediment controls (ESC)	_____
Daily inspection of ESC	_____
Maintenance/Repair of ESC	_____
Seeding/stabilization of disturbed areas	_____

Each of the Contractors and Subcontractors shall identify at least one trained individual from their company who will be responsible for implementation of the SWPPP. One trained individual shall be on-site on a daily basis when soil disturbance activities are being performed.

A trained contractor is defined by the General Permit as:

An employee from a contracting (construction) firm that has received four (4) hours of training, which has been endorsed by the NYSDEC, from a Soil and Water Conservation District, CPESC, Inc., or other NYSDEC endorsed entity, in proper erosion and sediment control principles. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years. This individual shall be responsible for implementation of the SWPPP.

The following individuals have been identified on this project as **trained contractors**:

CONTRACTOR:

Company _____

Trained

Individual _____

SUBCONTRACTOR:

Company _____

Trained

Individual _____

SUBCONTRACTOR:

Company _____

Trained

Individual _____

1.3 Certification of SWPPP Preparer

"I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the General Permit (GP-0-20-001). Furthermore, I understand that certifying false, incorrect, or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Name: Owen K. Speulstra, P.E.

Title: Project Engineer

Signature: _____

Date: March 24, 2022

2.0 INTRODUCTION

The Lansing Community Solar Project, LLC. (Project) is anticipated to have ±22.5 acres of disturbance. Under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, permit number GP-0-20-001, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared for projects that exceed 1.0 acre of disturbance. As such, a SWPPP (i.e. "Basic"/ESC SWPPP) has been prepared. This report will identify areas of disturbance and recommended Erosion and Sediment Control (ESC) measures that will mitigate the potential for sediment migration off-site, thereby ensuring that stormwater discharges do not negatively affect adjacent waterbodies due to construction-related disturbances.

2.1 Site Description

The Project is located on Lansingville Road in the Town of Lansing, Tompkins County, New York. The existing site is primarily agricultural land. The Project will occupy approximately ±22.5 acres of a ±107.1-acre project site. The Project site resides on the north portion of the parcel, identified by the Tax ID: 16.-1-19.2, which is split by the NYSEG utility boundary. The site is located west of Lansingville Road, 650 feet south of the intersection of said road and Lockerby Hill Road. The site generally slopes to the northeast and southwest, split diagonally across the site. Areas to the north generally drain to a 32-inch HDPE culvert which crosses to the east of Lansingville Road and travels for approximately one (1) miles to Salmon Creek, a tributary of Cayuga Lake. Areas along the southwestern half of the site discharge to freshwater emergent wetlands west of the property. From there, stormwater enters a stream that continues south/southeast for approximately 2.3 miles until discharging to Salmon Creek. Modeling of the existing and proposed site conditions can be found in Appendix E. Cover types at the project site consist of an existing farm road, and the primary cover type consisting of meadow. A site location map is included in Appendix A of this report.

There are three (3) federally regulated freshwater emergent wetlands within the project site, Palustine Emergent Wetlands A, B and C. Wetland A is located in the western section of the site, southwest of the proposed solar array. Wetland B is centrally located within the site, southeast of the proposed solar array. Wetland

C is located north of the site and proposed solar array. Exact locations can be found in Appendix F. No temporary or permanent disturbance will occur within the federally regulated wetlands as a result of the solar array installation.

2.1.1 Soils

The Natural Resources Conservation Service (NRCS) Web Soil Survey was consulted to obtain preliminary soil data for the site. The Web Soil Survey shows that the proposed project is comprised of $\pm 73\%$ HSG "B" soils, which are typically moderate draining. The remaining $\pm 27\%$ of the project site is comprised of HSG "B/D" & "C/D" soils which under normal conditions are typically poor draining. The proposed solar array area will be built on HSG "B" and "B/D" soils. The project area is minimally sloped. A printout from the Web Soil Survey website is included in Appendix C. A detailed breakdown of the areas and soils can be found in Appendix E Drainage Calculations.

2.1.2 Historic Places Screening

Per requirements of the General Permit, it is required that this SWPPP provides documentation of due diligence review by New York State Office of Parks and Recreation and Historic Preservation (OPRHP). C.T. Male is coordinating the project with OPRHP. OPRHP has requested additional information regarding potentially historic structures to assess national registry eligibility within the vicinity of the project.

2.1.3 Threatened and Endangered Species

Correspondence was received from the NYSDEC National Heritage Program (NHP) in October 2022, which indicated that there are two species of concern within the project area. One (1) threatened species, the northern long-eared bat, and one (1) candidate species, the monarch butterfly, may occur within the boundary of the proposed solar array. This correspondence is included in Appendix D of this report.

No trees will be removed as a result of this project, and therefore will not be a disturbance to any northern long-eared bat habitats that could be present on the site. A low-growing wildflower and grass mix, including butterfly milkweed,

will be utilized on site. This seed mix will provide an adequate habitat for the monarch butterfly species.

2.2 Proposed Construction Activities

The Project consists of the construction of a ground-mounted solar array on ± 22.5 acres of a ± 107.1 -acre project site. One (1) pervious gravel access road will be installed on the project site.

The pervious gravel access road will replace the existing impervious farm road, which enters the site from Lansingville Road near the northeastern parcel boundary. Two (2) $\pm 1,000$ square feet concrete equipment pads will be constructed to service the solar array. As such, the total impervious cover will decrease by approximately 0.41 acres.

The total land disturbance (temporary and permanent) associated with the project will be approximately ± 22.5 acres, which includes the installation of the solar array, the pervious gravel access road, fencing, concrete equipment pads as well as the installation of conduit that will run through the solar array to the equipment pads and point of electrical interconnect. The two (2) concrete equipment pads will be located within the solar array.

Note that temporary staging/laydown area will not cause additional land disturbance, as geotextile fabric will be placed on top of existing stabilized (i.e., grassed/vegetated) areas with a stone overlay (refer to details on plans). At the completion of construction, the stone and fabric will be removed and taken off-site.

Appendix F Construction Sequence Plan has been provided to detail the limits of disturbance and ensure that no more than 5-acres will be disturbed at any given time. If during construction it is anticipated that more than 5 acres will be disturbed at a given time, a 5-acre waiver will need to be requested and obtained from the NYSDEC Regional office.

Since the anticipated disturbance will be above the 1-acre threshold, obtaining coverage under the General Permit GP-0-20-001 (General Permit) is required. A draft electronic Notice of Intent (eNOI) has been prepared and will be submitted to the NYSDEC Central Office. The draft eNOI and a copy of the General Permit

has been included in Appendix B. The objective of this SWPPP is to identify the areas of disturbances caused by the proposed construction and to implement Erosion and Sediment Control Best Management Practices (ESC BMPs) to prevent polluted runoff from discharging off-site. ESC plans and BMP details have been included in this report and can be found in Appendix G.

The Erosion and Sediment Controls being implemented in this project generally consist of compost filter sock/silt fence, stabilized construction access, concrete washout and a temporary staging/laydown area.

Erosion and sediment control plans and details were prepared by C.T. Male Associates (C.T. Male).

2.3 Potential Sources of Pollution

Potential sources of pollution resulting from construction activities at the site include:

- Eroded soils
- Construction chemicals (fuels, solvents, etc.)
- Construction debris
- Tracking of sediment onto area roadways
- Concrete washout operations

3.0 STORMWATER MANAGEMENT PLANNING

3.1 Stormwater Treatment

As noted in Section 2.2, of this report one (1) access road is proposed for the project site. This proposed access will be a limited use pervious access road; therefore, no permanent stormwater treatment practices associated with the roadway have been incorporated. Soil restoration shall follow the requirements in Table 5.3 of the New York State Stormwater Management Design Manual (Design Manual). This includes the requirements per Deep Ripping and De-compaction from DEC, dated 2008. The equipment pad will have stone diaphragms/ drip strips around the perimeter for stormwater treatment/dispersion.

The overall drainage area includes two (2) sub catchment areas with two (2) Design Locations where runoff exits the project area. Drainage mapping has been included in Appendix E of this report.

Existing and proposed conditions were modeled using HydroCAD Version 10.0 to confirm the hydrology is not significantly impacted. Per the Design Manual, the calculated stormwater volume for a 1-year storm will be less than or equal to existing conditions; the calculated peak flow rates for the 10-year and 100-year storm events are adequately controlled. A summary of the 1-year storm volumes and 10- and 100- year calculated peak flow rates is shown in Tables 1 and 2 below:

Table 1: Runoff Volume 1-Year Storm

Design Location	1 Year Storm (af)		
	Existing	Proposed	% Change
DL-1	0.589	0.589	0.0%
DL-2	0.265	0.265	0.0%

Table 2: Calculated Peak Flow Rate Summary

Design Location	Storm					
	10 Year (cfs)			100 Year (cfs)		
	Existing	Proposed	% Change	Existing	Proposed	% Change
DL-1	20.14	20.14	0.00%	82.54	82.54	0.00%
DL-2	11.19	11.19	0.00%	51.36	51.35	-0.02%

Appendix A of the General Permit defines Alter Hydrology from Pre to Post-Development Conditions as the following: “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)”. The table above demonstrates that at each Design Location, the calculated peak flow rates have remained the same. The Design Manual focuses on the volume associated with a 1-year storm event, as opposed to the flow rate. The calculated runoff volumes at each design point during a 1-year storm event are equal to existing conditions volumes. As such, it is not anticipated that the hydrology of the site will be significantly impacted by the proposed project.

Refer to the attached Drainage Calculations included as Appendix E to this report for detailed calculation information.

4.0 EROSION AND SEDIMENT CONTROL PLAN

4.1 Description of Erosion and Sediment Control Practices

The following erosion and sediment control practices will be constructed as part of the project:

- Stabilized construction entrance
- Silt fence / compost filter socks
- Concrete washout area
- Topsoiling, seeding and mulching

Refer to the project site plans provided in Appendix G for erosion and sediment control measures that are associated with this project.

4.2 General Stabilization Requirements

Stabilization in areas to remain vegetated shall consist of seeding and straw/mulch. The Contractor shall initiate stabilization measures as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) calendar days after construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instances:

- A. When the initiation of stabilization is not practicable due to excessive snow cover (which is defined as at least one foot), at the discretion of the qualified inspector.
- B. When construction activity on a portion of the site has temporarily ceased and earth-disturbing activities shall resume within twenty-one (21) calendar days, then temporary stabilization measures do not need to be initiated on that portion of the site.

4.3 Winter Stabilization Requirements

Site runoff and sediment control must be adequately managed when site work/disturbance is slated to occur during winter months.

- A. Snow must be managed to provide adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.
- B. Snow must be managed such that silt fence and/or other erosion and sediment controls are maintained/protected. If erosion and sediment controls are damaged due to snow removal/movement activities, they must be promptly repaired.
- C. A minimum 25-foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence/compost filter socks with tall stakes to keep visible above snow pack.
- D. Drainage structures must be kept free/open of snow and ice dams. Any debris, ice dams or debris from blowing that restrict the flow of runoff and meltwater shall be removed.
- E. Sediment barriers must be installed at all perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.
- F. Soil stockpiles must be adequately protected per the NYSDEC "Blue" Book or site-approved remediation plan.
- G. If straw mulch alone is used for temporary stabilization, it must be applied at 4 tons/acre (i.e., double the standard application rate).
- H. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil shall be stabilized at the end of each workday unless:
 - a. work will resume within 24 hours in the same area and no precipitation is forecast or;
 - b. the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations or water management areas.
- I. Use stone paths and/or existing paved surfaces to provide access to areas where construction vehicle traffic is anticipated.

4.4 Site Disturbance

It is expected that the total disturbance associated with the project will be approximately 21.5 acres. The General Permit covers up to five (5) acres of

simultaneous disturbance. Appendix F, the Construction Sequencing Plan, has been provided to detail the limits of disturbance and ensure that no more than 5-acres will be disturbed at any given time. If at any point in time the contractor anticipates that disturbance will exceed more than five (5) acres at a given time, it will be necessary to obtain a waiver from this limitation of the General Permit. The Contractor shall not disturb greater than five (5) acres at any given time without obtaining prior written approval of the waiver request from the regional NYSDEC office.

The area of disturbance at any given time will be dependent on the Contractor's schedule, work plan, availability of equipment and construction materials, and other factors.

4.5 Soil Stabilization Plan

4.5.1 Temporary

Areas that are to remain temporarily disturbed for longer than 14 days (or 7 days if the disturbed area is greater than 5.0 acres) shall be stabilized by temporary seeding, wood chips and/or mulching. Temporary seeding, wood chip placement and/or mulching shall be performed within 24 hours of the end of grading activities.

Temporary seeding mixture is specified on the project plans. Newly seeded areas shall be protected by applying straw at a rate of 2 tons per acre (apply straw at a rate of 4 tons per acre in the winter). An alternative to applying seeding and straw is to spread wood chips using a minimum depth of 3".

4.5.2 Permanent

Pervious areas that have achieved final grading shall be stabilized by permanent seeding and straw mulching. Permanent seeding shall be performed between April 1 and May 31 (Spring Planting), or between August 15 and September 30 (Fall Planting). If planting is planned to occur outside of these timeframes, it should be discussed with the design engineer. Seeding shall be performed within 24 hours of the completion of grading activities.

The permanent seed mixture is specified on the project plans.

Alternate seed mixes are acceptable, provided they meet the requirements of the latest edition of the NYS Standards and Specifications for Erosion and Sediment Control.

Straw mulching shall consist of small grain straw applied at a rate of 2 tons per acre.

4.6 Maintenance of BMP's

All erosion and sediment control measures shall be inspected and maintained in accordance as follows:

4.6.1 Stabilized Construction Entrance

The stabilized construction entrance shall be installed in the location shown on the ESC plan, and per the stabilized construction entrance detail on the ESC detail sheet. The stabilized construction entrance should be installed prior to the start of earth moving/soil disturbance activities on the project site. The construction entrance shall be maintained at all times and road sweeping at the entrance to each shall be conducted if sediment is tracked off-site and onto Lansingville Road. Stabilized construction entrances need to be removed when all areas have been stabilized and sediment tracking is no longer a concern.

4.6.2 Silt Fence/Compost Filter Sock

The Contractor shall visually inspect all silt fencing/compost filter socks at the site after every significant rainfall event, and at a minimum frequency of once a week during dry weather conditions. Sediment accumulated to a depth of three inches or more shall be immediately removed and either spoiled in an upland area, or disposed of as non-hazardous construction waste. Silt fence/compost filter sock which has been damaged or knocked over shall be repaired and/or replaced within 24 hours of the deficiency being noticed. Silt fencing/compost filter sock shall be installed per the manufacturers' recommendations. These measures shall remain in-place until tributary upland areas have achieved permanent stabilization (i.e., minimum of 80% vegetative growth over the

entirety of areas disturbed by project work). The use of compost filter socks in accordance with the publication "New York State Standards and Specifications for Erosion and Sediment Control" is deemed an acceptable substitute for silt fence. Compost filter socks are the preferred method of sediment control in areas adjacent to wetland areas, as their installation requires less ground disturbance than traditional silt fence installation.

4.6.3 Concrete Washout

Concrete washouts should be installed so that concrete waste is contained and not littered around the site. The washouts should be constructed per the detail on the associated plans. Washouts should always be lined and concrete should be removed when the maximum capacity of the washout is near (when concrete waste level is within 1-foot of the top of washout). The concrete washout(s) shall remain in-place until the equipment/transformer pad and fence posts are poured.

4.7 Control of Litter, Construction Chemicals, and Construction Debris

During construction, the following materials could be used and stored on-site: Concrete additives, paints/solvents, acids, cleaning products, petroleum-based products/fuel, pesticides, fertilizers, construction wastes, sanitary wastes, and tackifier for soil stabilization. The aforementioned materials shall be managed using the following procedures:

4.7.1 Good Housekeeping

1. Store only products required to do the job on the site, and use all of a product before disposing of the container.
2. All materials stored on-site shall be stored in a neat and orderly manner. Containers shall be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
3. Products shall be kept in their original container with manufacturer's label.
4. For all products, the manufacturer's recommendations for proper use and disposal shall be followed.

4.7.2 Hazardous Products

1. Material Safety Data Sheets (MSDS) for each substance with hazardous properties shall be maintained on-site. Each employee who must use the product shall be instructed on the use of MSDS Sheets and specific information applicable to that product.
2. If a surplus of the hazardous product must be disposed of, manufacturer's, local/state/federal recommended methods for disposal shall be followed.

4.7.3 Petroleum Products

1. All on-site vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage.
2. Petroleum products shall be sealed in properly labeled containers.

4.7.4 Fertilizers

1. Fertilizers shall be applied in the minimum amounts recommended by the manufacturer and be immediately worked into the soil to limit exposure to stormwater.
2. Fertilizers shall be stored in a plastic bin with a lid. The bin shall be kept in a covered area to prevent spills.

4.7.5 Paints and Solvents

1. Excess paint and solvents shall not be discharged into the storm sewer and shall be properly disposed of according to New York State regulations.

4.7.6 Concrete Wastes

1. Wash water may be disposed of on the site in a specifically designed diked area or into forms to make other useful concrete products.
2. Hardened residue from the concrete washout area shall be disposed of as construction waste.

3. All concrete wash areas shall be located in an area where they are not likely to contribute to stormwater runoff. This determination shall be made by the Engineer or qualified professional during construction.

4.7.7 Solid/Construction Wastes

1. All waste materials shall be stored in an appropriate lidded dumpster, and disposed of by a waste management company licensed in New York State.
2. No construction materials shall be buried on-site, and all personnel shall be instructed on correct procedures for waste disposal.

4.7.8 Sanitary Wastes

1. All sanitary waste shall be collected from portable units by a New York State licensed portable facility provider.
2. All portable units shall be located in a place where they are not likely to contribute to stormwater runoff.

4.8 Stormwater Discharges Associated with Industrial Activity

This project does not include industrial activities.

4.9 Non-Conforming Elements

All elements of the erosion and sediment control plan are in conformance with the requirements of the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.

5.0 INSPECTION AND MAINTENANCE REQUIREMENTS

5.1 Contractor Requirements

1. All erosion and sediment control measures in the SWPPP and construction plans shall be maintained in effective operating condition during construction.
2. Per the General Permit, the Contractor shall inspect the erosion and sediment control measures in the SWPPP to ensure that they are being maintained in effective operating condition during construction. If soil disturbance activities have been temporarily suspended and temporary stabilization measures have been applied to disturbed areas, the Contractor may cease these ongoing inspections.
3. The Contractor may cease ongoing inspections of erosion and sediment control measures and remove these features when the Project has been completed and areas have received final stabilization.

5.2 Qualified Inspector Requirements

The qualified inspector is defined by the General Permit as the following:

A person knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other NYSDEC 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 received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles. After receiving the initial training, the trained 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.

5.3 SWPPP Inspection Requirements

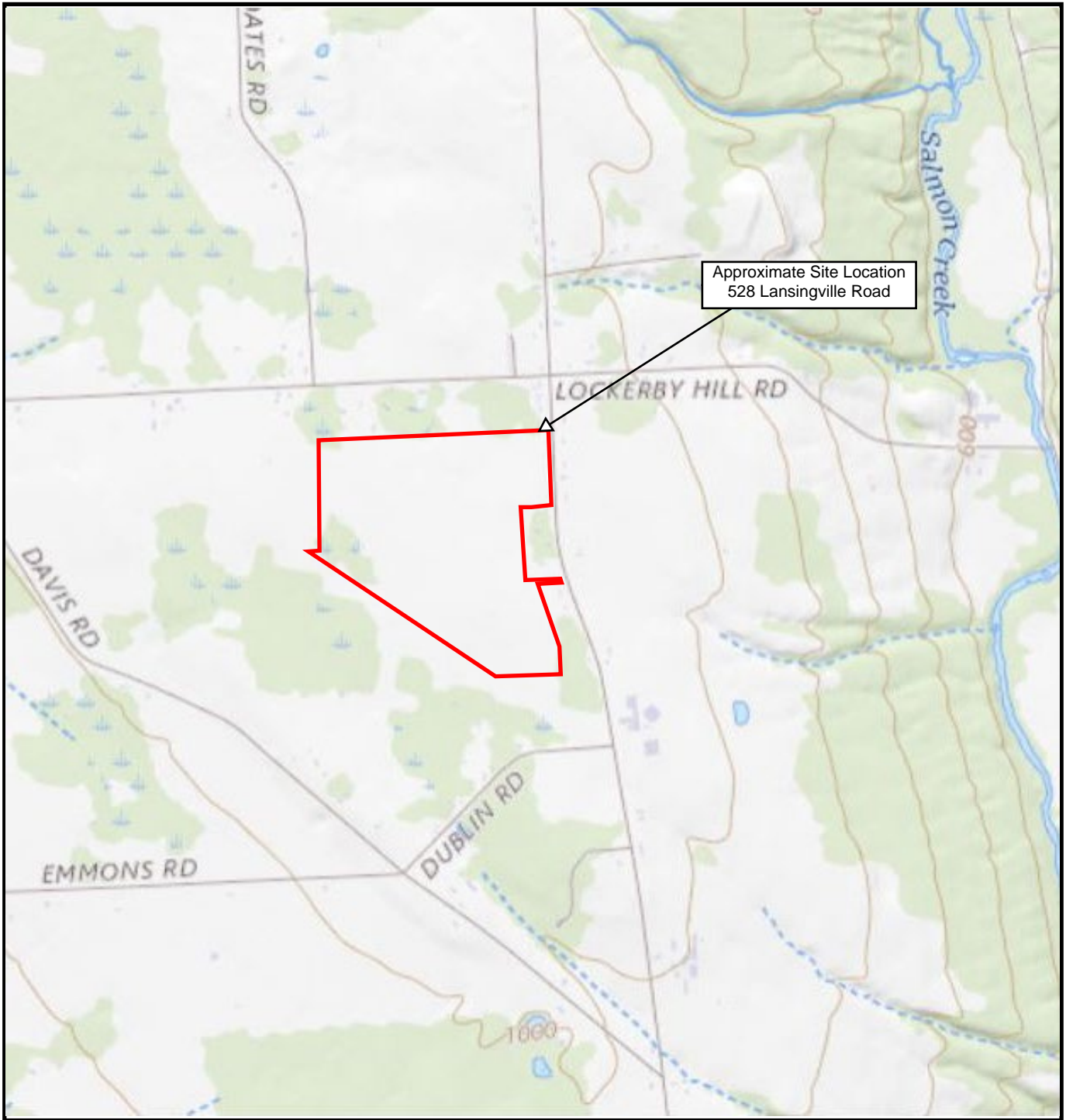
The qualified inspector shall conduct site SWPPP inspections in accordance with the General Permit the following timetable:

1. Inspect the installed erosion and sediment control measures at the site prior to the start of construction activities.
2. Inspect the site once every seven (7) calendar days during ongoing construction activities.
3. Inspect the site every thirty (30) days where soil disturbance activities have been temporarily suspended and temporary stabilization measures have been applied to disturbed areas. Owner/Operator shall contact the regional NYSDEC office in writing prior to reducing the frequency of inspections.
4. Inspect all points of discharge to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site.
5. Upon project completion, perform a final inspection to certify that the Project has achieved 80% vegetative cover.

The inspector shall perform the SWPPP inspections in accordance with the General Permit requirements. Within one (1) business day of completing the SWPPP inspection, the qualified inspector shall notify the Owner/Operator and Contractor of any corrective actions that need to be taken.

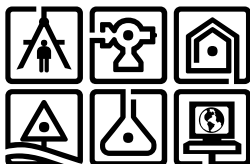
All completed SWPPP inspection forms shall be maintained in the on-site copy of this SWPPP, which shall always remain on the construction site.

APPENDIX A
Site Location Mapping



MAP REFERENCE

United States Geological Survey
 7.5 Minute Series Topographic Map
 Quadrangle: Ludlowville, NY
 Date: 2019



C.T. MALE ASSOCIATES

ENGINEERING, SURVEYING, ARCHITECTURE
 LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE
 LATHAM, NY 12110

FIGURE 1 - SITE LOCATION MAP

TOWN OF LANSING

TOMPKINS COUNTY, NY

SCALE: 1:24,000

DRAFTER: JRS

PROJECT No: 22.2303



The locations and features depicted on this map are approximate and do not represent an actual survey.

Figure 2: Subject Site Map

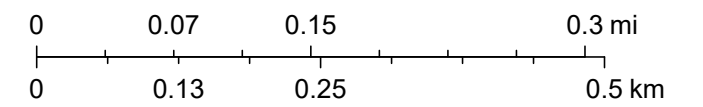


November 7, 2022

LEGEND

-  Subject Site
-  Tax Parcels

1:9,028



NYS ITS GIS Program Office, Westchester County GIS, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

APPENDIX B

Draft eNOI (Notice of Intent) and General Permit
(GP-0-20-001)

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.35

(Submission #: HPR-TCCN-Z06HK, version 1)

Details

Originally Started By Martin Schmidt
Alternate Identifier Lansing Community Solar
Submission ID HPR-TCCN-Z06HK
Submission Reason New
Status Draft

Form Input

Owner/Operator Information

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

Genie Solar Energy

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Schwandt

Owner/Operator Contact Person First Name

Sara

Owner/Operator Mailing Address

520 Broad Street

City

Newark

State

New Jersey

Zip

07102

Phone

4195081405

Email

sschwandt@geniesolarenergy.com

Federal Tax ID

NONE PROVIDED

Project Location

Project/Site Name

Lansing Community Solar

Street Address (Not P.O. Box)

528 Lansingville Road

Side of Street

West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Town of Lansing

State

NY

Zip

14882

DEC Region

7

County

TOMPKINS

Name of Nearest Cross Street

Lockerby Hill Road

Distance to Nearest Cross Street (Feet)

650

Project In Relation to Cross Street

South

Tax Map Numbers Section-Block-Parcel

16.-1-19.2

Tax Map Numbers

16.-1-19.2

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

42.592474513149554,-76.55495434757609

Project Details**2. What is the nature of this project?**

New Construction

3. Select the predominant land use for both pre and post development conditions.**Pre-Development Existing Landuse**

Pasture/Open Land

Post-Development Future Land Use

Other: Community Solar

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)

107.1

Total Area to be Disturbed (acres)

22.5

Existing Impervious Area to be Disturbed (acres)

0.5

Future Impervious Area Within Disturbed Area (acres)

0.0

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

No

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

0

B (%)

73

C (%)

0

D (%)

27

7. Is this a phased project?

Yes

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

12/01/2023

End Date

12/01/2024

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

Wetland

9a. Type of waterbody identified in question 9?

Wetland/State Jurisdiction On Site (Answer 9b)

Other Waterbody Type Off Site Description

NONE PROVIDED

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

Delineated by Consultant

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

No

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

No

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

No

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 D (provided the map unit name is inclusive of slopes greater than 25%), 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?

No

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

Yes

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

Town of Lansing

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?

No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?

No

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

No

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

No

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)?

Yes

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)?

No

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:
Professional Engineer (P.E.)

SWPPP Preparer

C.T. Male Associates

Contact Name (Last, Space, First)

Speulstra Owen

Mailing Address

50 Century Hill Drive

City

Latham

State

New York

Zip

12110

Phone

5187867618

Email

o.speulstra@ctmale.com

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

[Download SWPPP Preparer Certification Form](#)

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?

Yes

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

Temporary Structural

Dust Control

Silt Fence

Stabilized Construction Entrance

Biotechnical

None

Vegetative Measures

Mulching

Seeding

Permanent Structural

None

Other

Concrete Washout and Stockpile

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).

NONE PROVIDED

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.

Based on NYSDEC Guidance Documents for Solar Development, it is our opinion that the proposed project meets the Scenario 1 guidelines..

Solar panels will be constructed on Post and Rack systems and elevated off the ground. Solar panels are spaced based on the MD Guidance Documents to allow for continued sheet flow.

Solar panels will be constructed generally parallel to the contours, orientated North South. The average ground slope under the solar array is less than 5%. Based upon the relatively flat nature of the existing grade, panel row spacing, and vegetative cover, it is anticipated that sheet flow conditions will be generally maintained.

The ground surface below the panels will consist of a well-established vegetative cover. Construction of the solar panels will not alter the hydrology from pre-to post development conditions.

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)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree 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 manufacturer 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

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?

No

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?

No

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



Department of
Environmental
Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

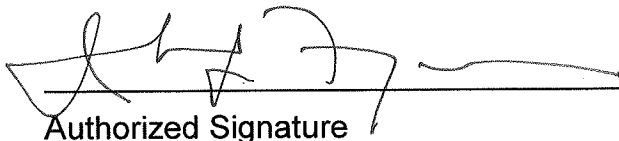
Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator



Authorized Signature

1-23-20

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:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants to surface waters of the State*.
3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (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 *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
 - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
 - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that *overbank* control is not required.

c. Sizing Criteria for Redevelopment Activity

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

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or 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. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection 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 *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 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. *Discharges from construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. PERMIT COVERAGE

A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first 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

1. 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, 4th 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 not 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 not 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

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. 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

1. 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 SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, 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
 - l. 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;

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

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

C. Required SWPPP Components by Project Type

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

Part IV. 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, with the exception of:
 - 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 not directly discharging to one of the 303(d) segments listed in Appendix E;

- b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is 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;
 - 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;
- h. 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;
- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and

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

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.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; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

- b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
 - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.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-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has 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:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) the chief executive officer of the agency, or
 - (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:

1. Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

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

N. Permit Actions

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

O. Definitions

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

P. Re-Opener Clause

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

Q. Penalties for Falsification of Forms and Reports

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

R. Other Permits

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

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

<p>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</p> <ul style="list-style-type: none">• Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E• Construction of a barn or other <i>agricultural building</i>, silo, stock yard or pen.
<p>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</p> <p>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.</p>
<p>The following construction activities that involve soil disturbances of one (1) or more acres of land:</p> <ul style="list-style-type: none">• 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

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- 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

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family 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

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- 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

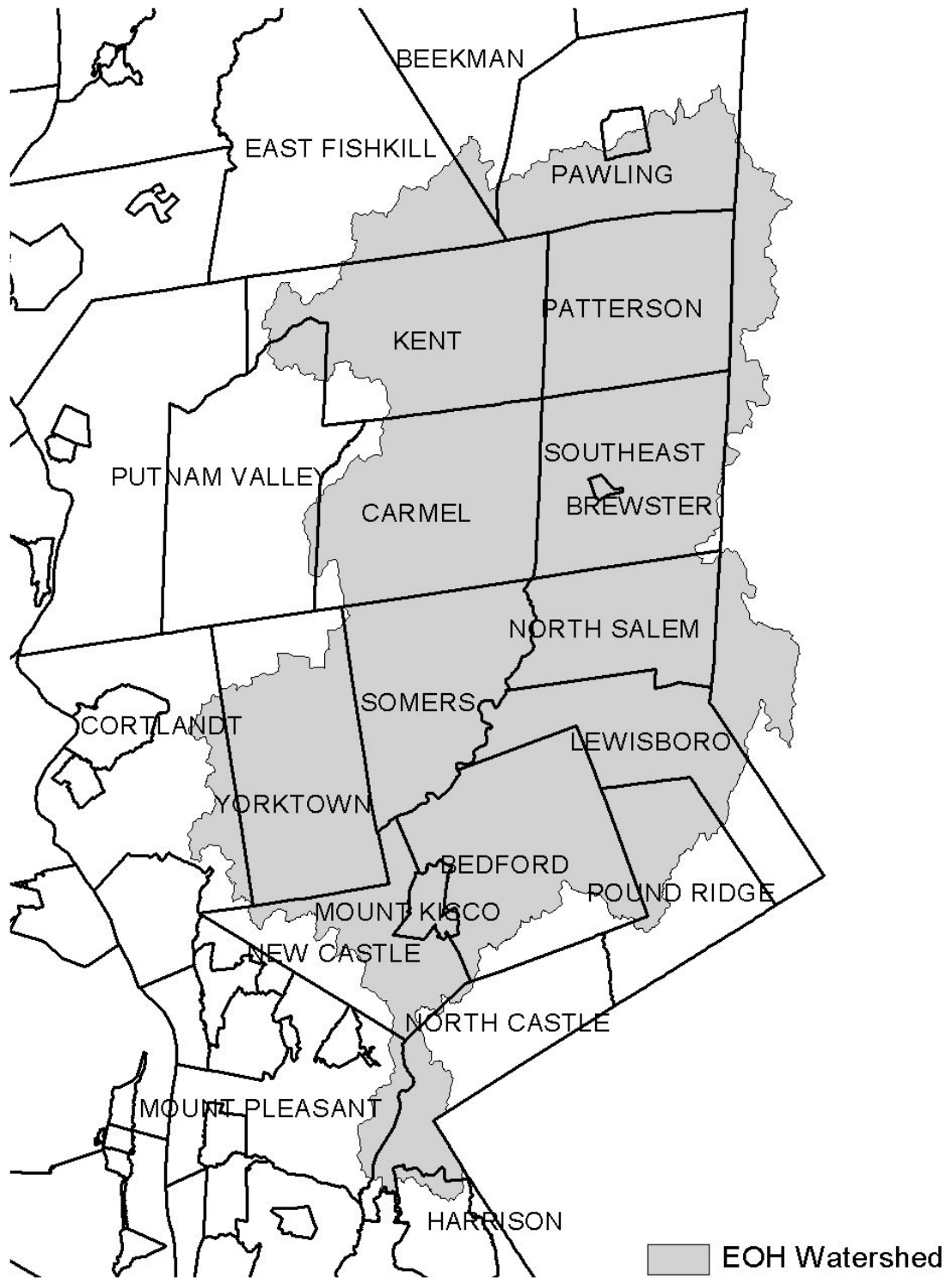


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed



Figure 4 - Oscawana Lake Watershed

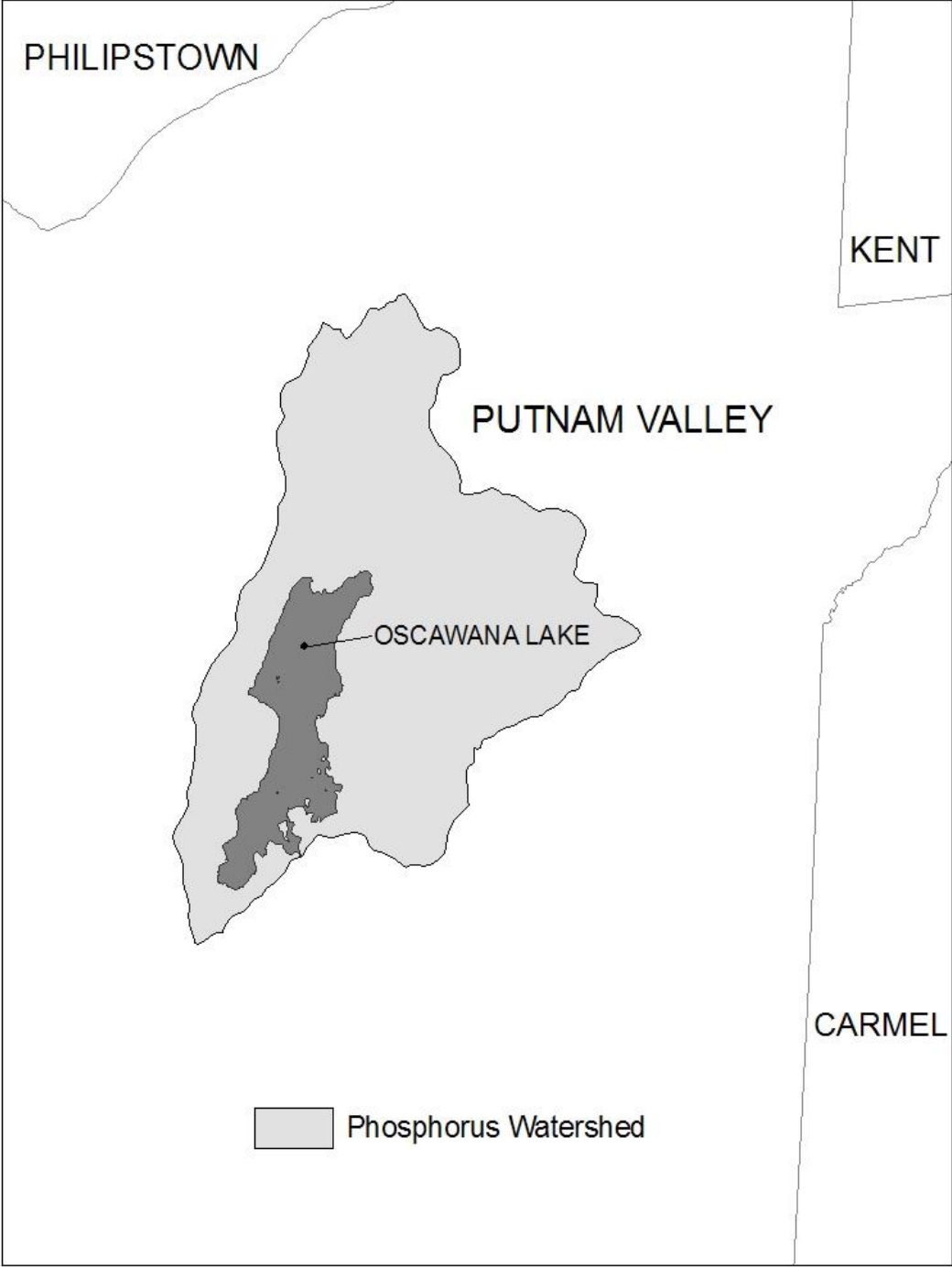
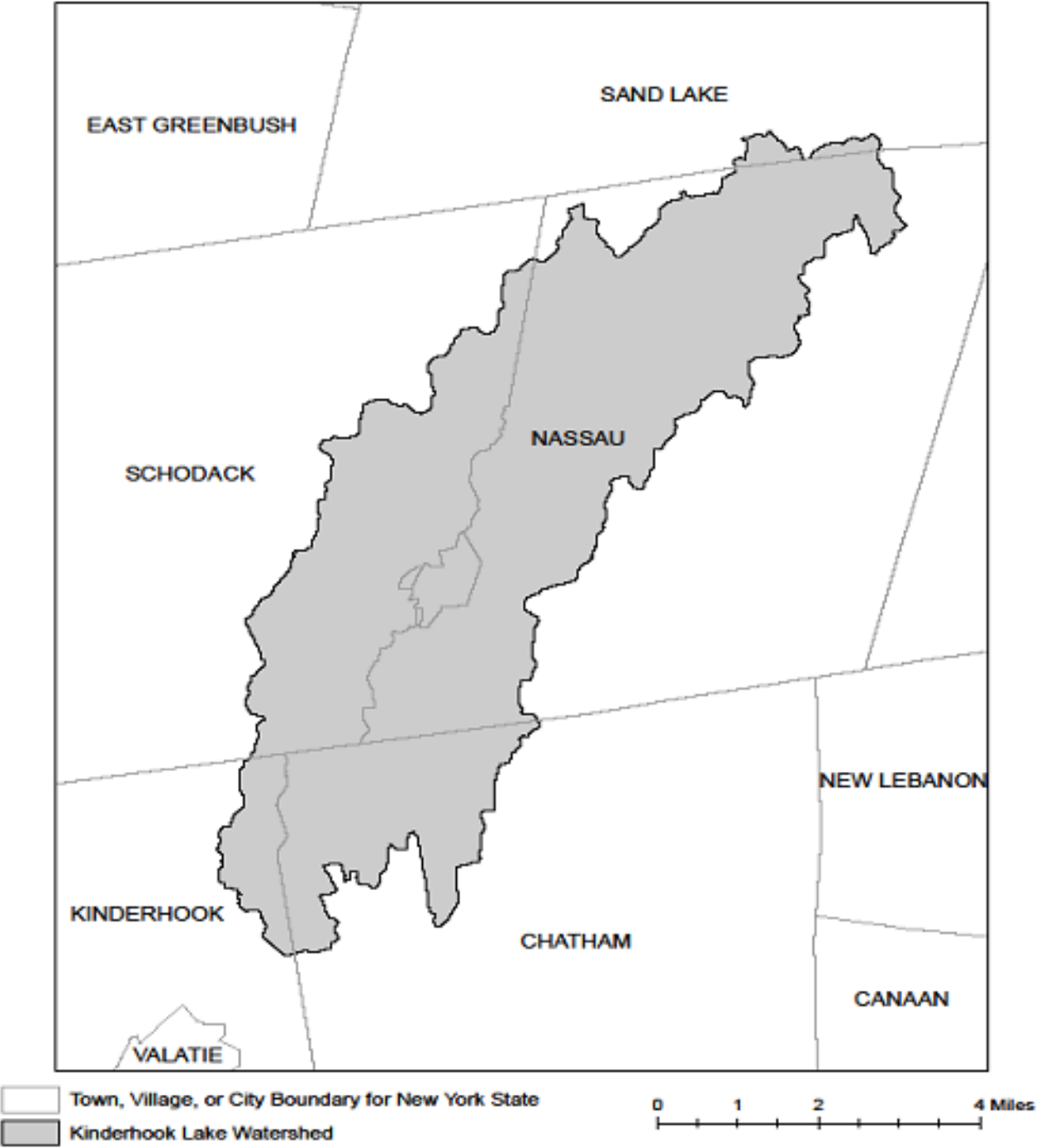


Figure 5 - Kinderhook Lake Watershed



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

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

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

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

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

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

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

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

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

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

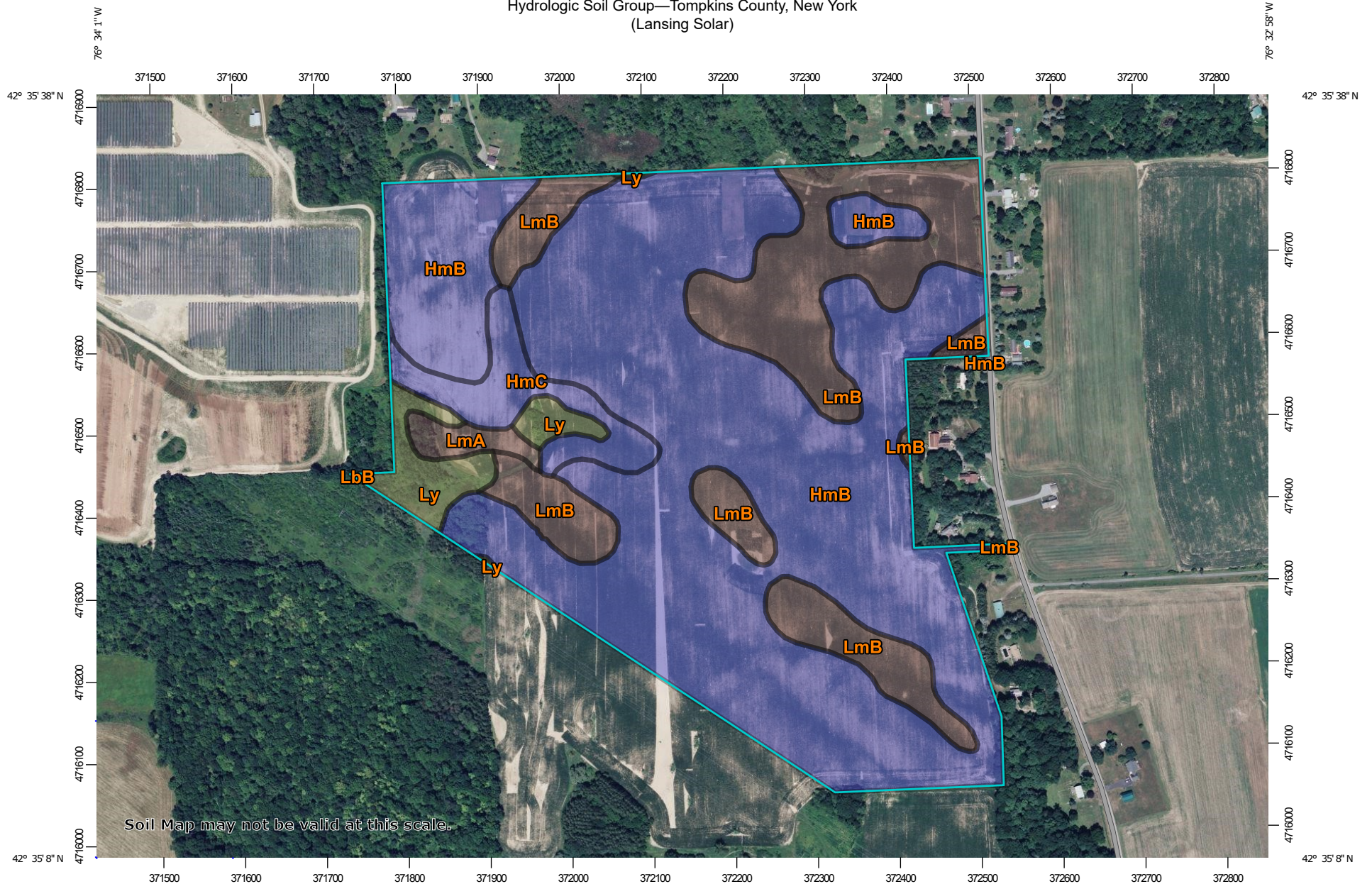
Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, 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

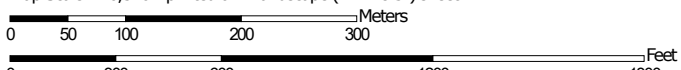
<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL.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

APPENDIX C
Soils Information

Hydrologic Soil Group—Tompkins County, New York
(Lansing Solar)



Map Scale: 1:6,540 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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: Tompkins County, New York
 Survey Area Data: Version 18, Sep 10, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HmB	Honeoye gravelly silt loam, 2 to 8 percent slopes	B	73.1	68.2%
HmC	Honeoye gravelly silt loam, 8 to 15 percent slopes	B	5.2	4.8%
LbB	Lansing gravelly silt loam, 3 to 8 percent slopes	B	0.0	0.0%
LmA	Lima silt loam, 0 to 3 percent slopes	B/D	1.5	1.4%
LmB	Lima silt loam, 3 to 8 percent slopes	B/D	23.5	21.9%
Ly	Lyons soils, 0 to 3 percent slopes	C/D	4.0	3.7%
Totals for Area of Interest			107.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

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

Group 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.

Group 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.

Group 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.

Group 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 claypan 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 that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX D
Threatened and Endangered Species Correspondence



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2023-0005185
Project Name: 22.2303 Lansing Solar

October 17, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

Project Summary

Project Code: 2023-0005185
Project Name: 22.2303 Lansing Solar
Project Type: Power Gen - Solar
Project Description: Installation of 5.0 MW AC solar array
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.58978825,-76.55932935295783,14z>



Counties: Tompkins County, New York

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

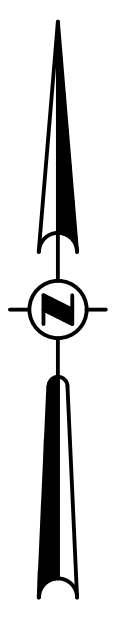
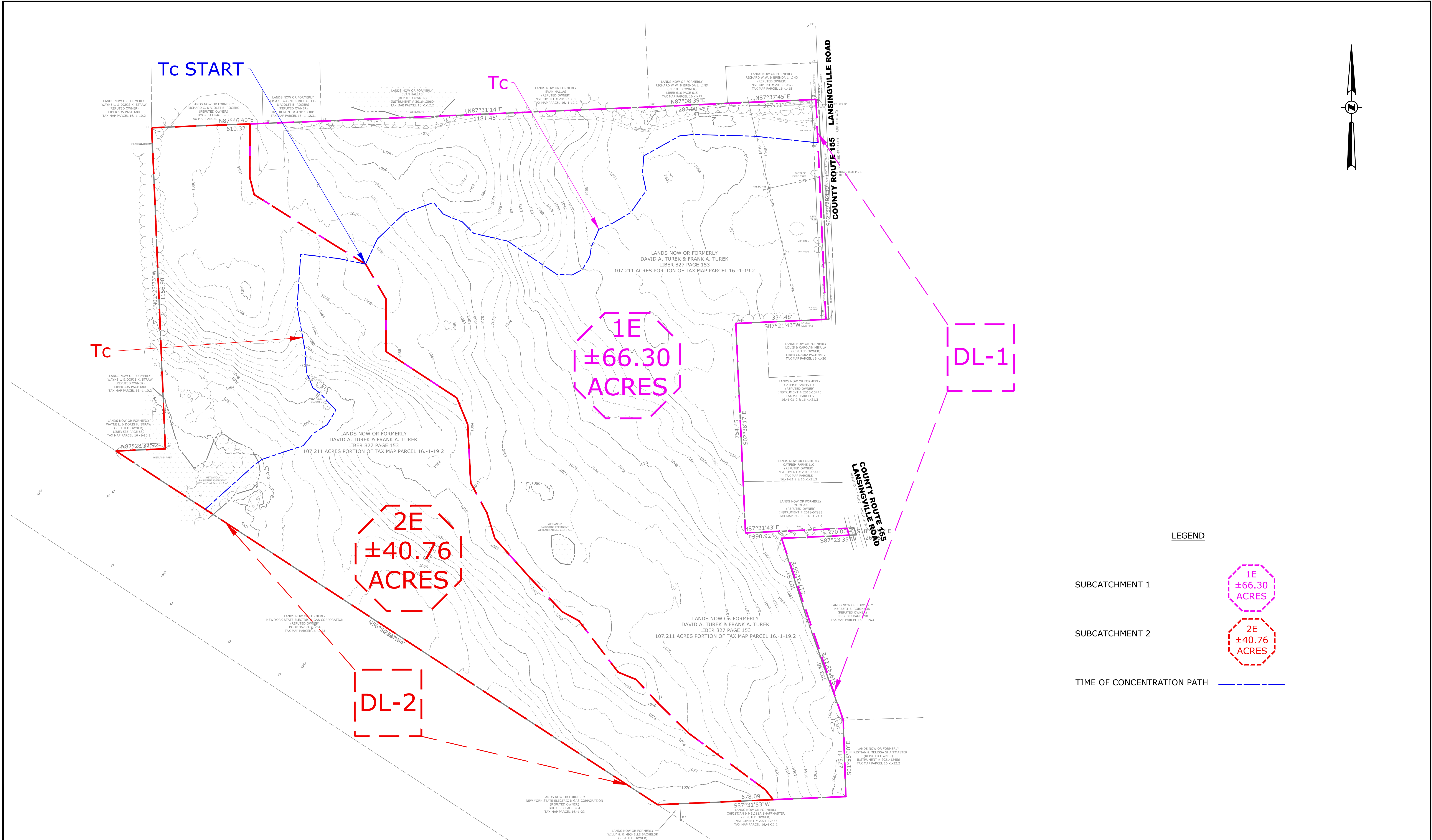
Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: C.T. Male Associates
Name: Jorel Spain
Address: 50 Century Hill Drive
City: Latham
State: NY
Zip: 12110
Email: j.spain@ctmale.com
Phone: 5187867400

APPENDIX E
Drainage Calculations



LEGEND

- SUBCATCHMENT 1 1E
±66.30
ACRES
- SUBCATCHMENT 2 2E
±40.76
ACRES
- TIME OF CONCENTRATION PATH

DL-2

1E
±66.30
ACRES

DL-1



DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

EXISTING DRAINAGE CONDITIONS

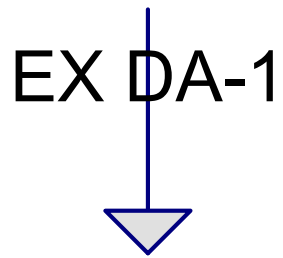
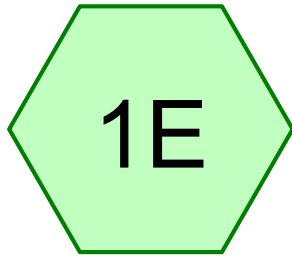
LANSING COMMUNITY SOLAR PROJECT, LLC.
GENIE SOLAR ENERGY

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

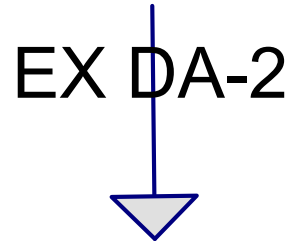
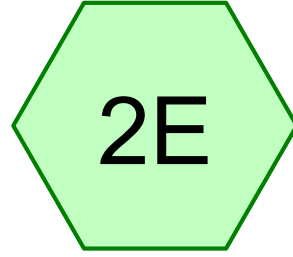
C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

DRE
SHEET 1 OF 1
DWG. NO:

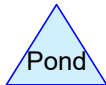
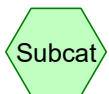
UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.
© 2023 C.T. MALE ASSOCIATES
DESIGNED: OKS
DRAFTED: BFJ
CHECKED: MLS
PROJ. NO : 22.2303
SCALE : 1"=150'
DATE : MARCH 23, 2023



DL-1



DL-2



Existing Conditions - Lansing Solar

Prepared by C T Male Associates

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Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type II 24-hr		Default	24.00	1	1.97	2
2	10-Year	Type II 24-hr		Default	24.00	1	3.36	2
3	100-Year	Type II 24-hr		Default	24.00	1	5.73	2

Existing Conditions - Lansing Solar

Prepared by C T Male Associates

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Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.460	98	Impervious Farm Road, HSG D (1E)
77.940	58	Meadow, non-grazed, HSG B (1E, 2E)
28.660	78	Meadow, non-grazed, HSG D (1E, 2E)

Existing Conditions - Lansing Solar

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
77.940	HSG B	1E, 2E
0.000	HSG C	
29.120	HSG D	1E, 2E
0.000	Other	

Existing Conditions - Lansing Solar

Type II 24-hr 1-Year Rainfall=1.97"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1E: EX DA-1

Runoff Area=66.302 ac 0.69% Impervious Runoff Depth>0.11"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=1.41 cfs 0.589 af

Subcatchment2E: EX DA-2

Runoff Area=40.758 ac 0.00% Impervious Runoff Depth>0.08"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=0.49 cfs 0.265 af

Reach DL-1: DL-1

Inflow=1.41 cfs 0.589 af
Outflow=1.41 cfs 0.589 af

Reach DL-2: DL-2

Inflow=0.49 cfs 0.265 af
Outflow=0.49 cfs 0.265 af

Existing Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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Summary for Subcatchment 1E: EX DA-1

Runoff = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af, Depth> 0.11"
 Routed to Reach DL-1 : DL-1

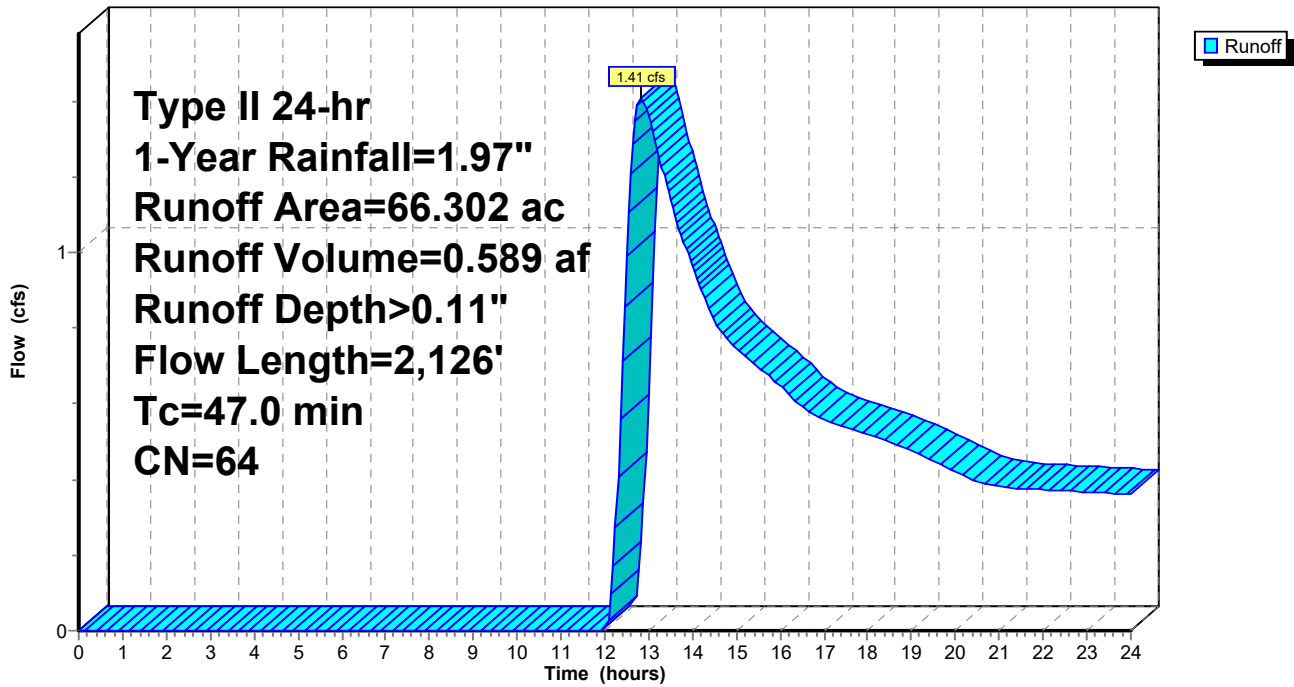
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-Year Rainfall=1.97"

Area (ac)	CN	Description
* 0.460	98	Impervious Farm Road, HSG D
45.497	58	Meadow, non-grazed, HSG B
* 20.345	78	Meadow, non-grazed, HSG D
66.302	64	Weighted Average
65.842		99.31% Pervious Area
0.460		0.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1E: EX DA-1

Hydrograph



Existing Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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Summary for Subcatchment 2E: EX DA-2

Runoff = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af, Depth> 0.08"
 Routed to Reach DL-2 : DL-2

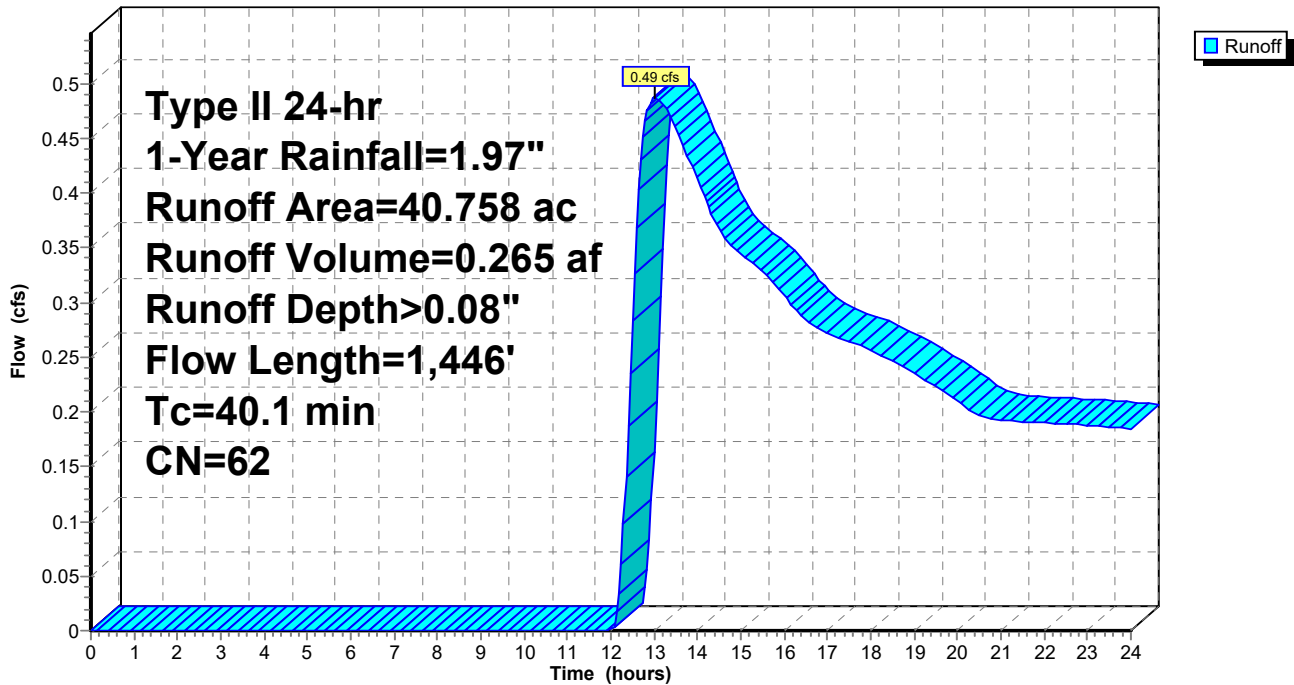
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-Year Rainfall=1.97"

Area (ac)	CN	Description
32.443	58	Meadow, non-grazed, HSG B
8.315	78	Meadow, non-grazed, HSG D
40.758	62	Weighted Average
40.758		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2E: EX DA-2

Hydrograph



Existing Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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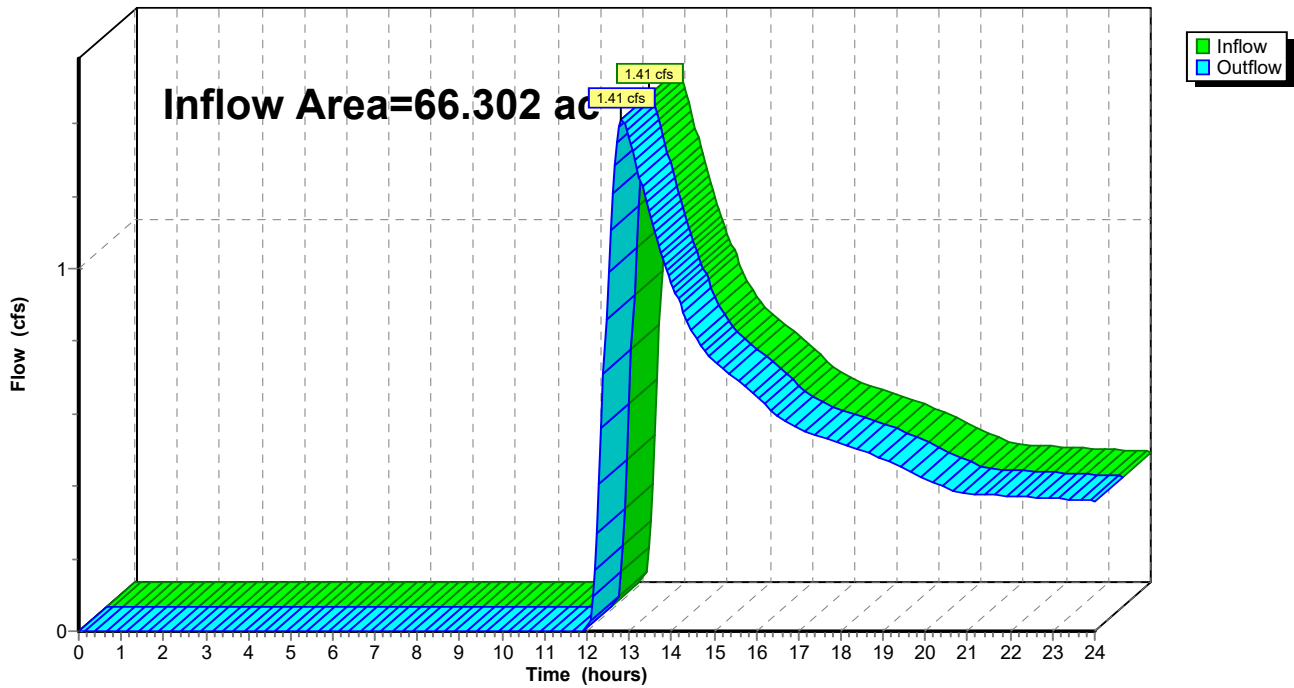
Summary for Reach DL-1: DL-1

Inflow Area = 66.302 ac, 0.69% Impervious, Inflow Depth > 0.11" for 1-Year event
Inflow = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af
Outflow = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Existing Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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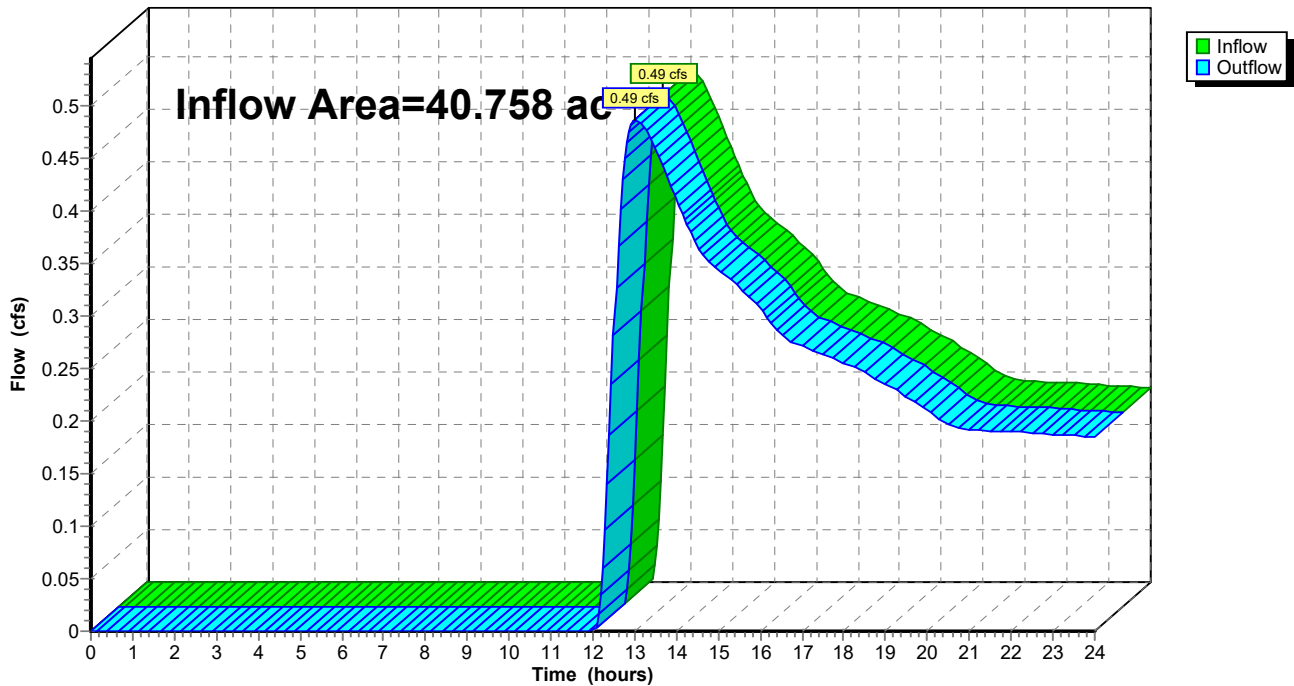
Summary for Reach DL-2: DL-2

Inflow Area = 40.758 ac, 0.00% Impervious, Inflow Depth > 0.08" for 1-Year event
Inflow = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af
Outflow = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph



Existing Conditions - Lansing Solar

Type II 24-hr 10-Year Rainfall=3.36"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1E: EX DA-1

Runoff Area=66.302 ac 0.69% Impervious Runoff Depth>0.62"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=20.14 cfs 3.440 af

Subcatchment2E: EX DA-2

Runoff Area=40.758 ac 0.00% Impervious Runoff Depth>0.54"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=11.19 cfs 1.838 af

Reach DL-1: DL-1

Inflow=20.14 cfs 3.440 af
Outflow=20.14 cfs 3.440 af

Reach DL-2: DL-2

Inflow=11.19 cfs 1.838 af
Outflow=11.19 cfs 1.838 af

Existing Conditions - Lansing Solar

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Type II 24-hr 10-Year Rainfall=3.36"

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Summary for Subcatchment 1E: EX DA-1

Runoff = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af, Depth> 0.62"
 Routed to Reach DL-1 : DL-1

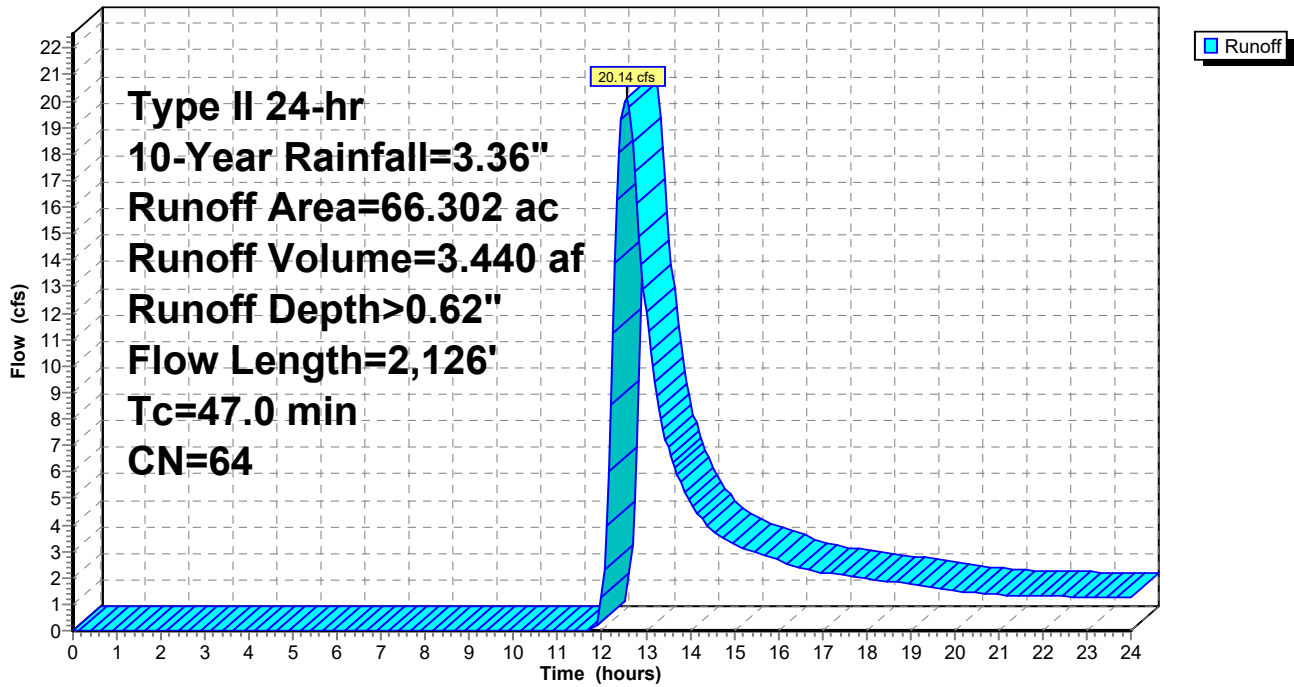
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-Year Rainfall=3.36"

Area (ac)	CN	Description
* 0.460	98	Impervious Farm Road, HSG D
45.497	58	Meadow, non-grazed, HSG B
* 20.345	78	Meadow, non-grazed, HSG D
66.302	64	Weighted Average
65.842		99.31% Pervious Area
0.460		0.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1E: EX DA-1

Hydrograph



Existing Conditions - Lansing Solar

Prepared by C T Male Associates

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Type II 24-hr 10-Year Rainfall=3.36"

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Summary for Subcatchment 2E: EX DA-2

Runoff = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af, Depth> 0.54"
 Routed to Reach DL-2 : DL-2

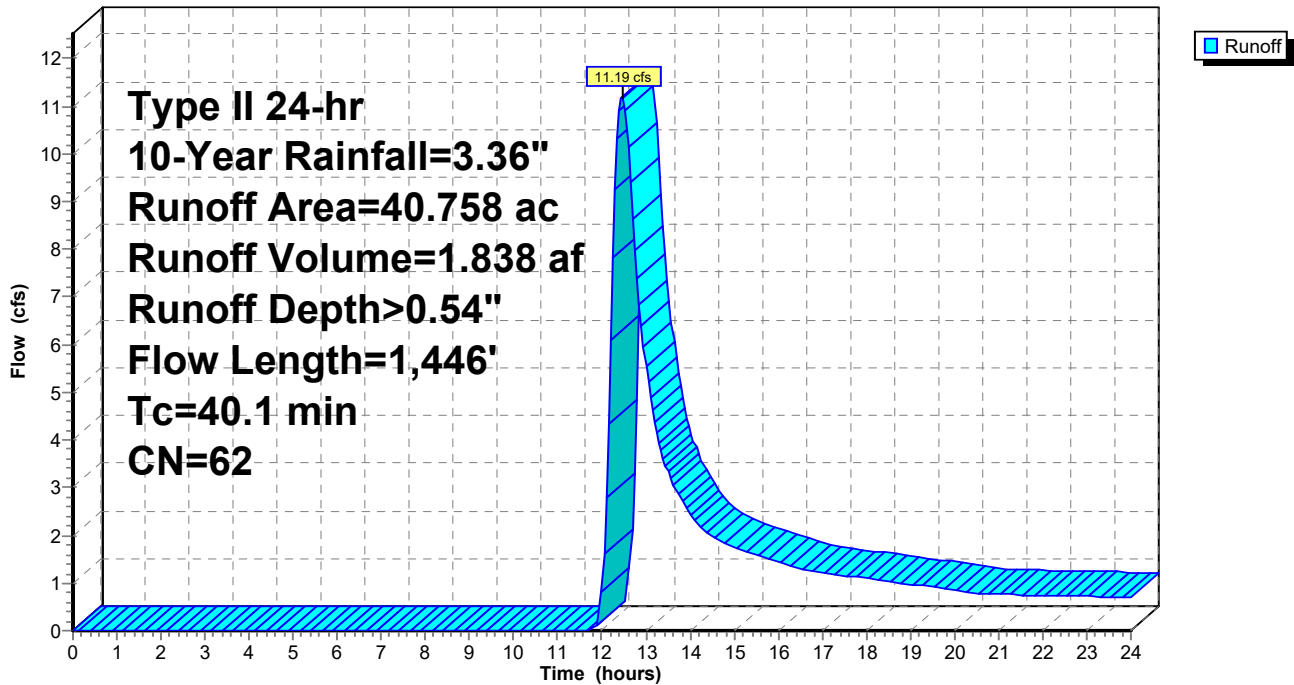
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-Year Rainfall=3.36"

Area (ac)	CN	Description
32.443	58	Meadow, non-grazed, HSG B
8.315	78	Meadow, non-grazed, HSG D
40.758	62	Weighted Average
40.758		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2E: EX DA-2

Hydrograph



Existing Conditions - Lansing Solar

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Type II 24-hr 10-Year Rainfall=3.36"

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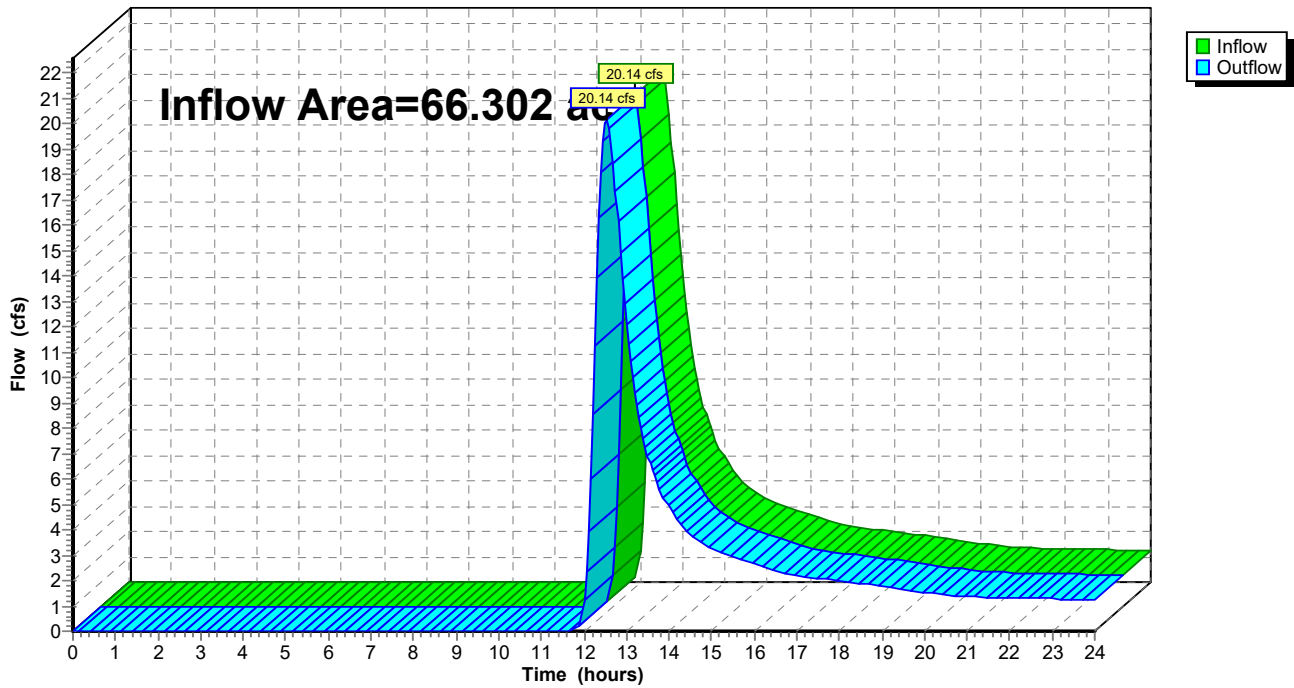
Summary for Reach DL-1: DL-1

Inflow Area = 66.302 ac, 0.69% Impervious, Inflow Depth > 0.62" for 10-Year event
Inflow = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af
Outflow = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Existing Conditions - Lansing Solar

Prepared by C T Male Associates

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Type II 24-hr 10-Year Rainfall=3.36"

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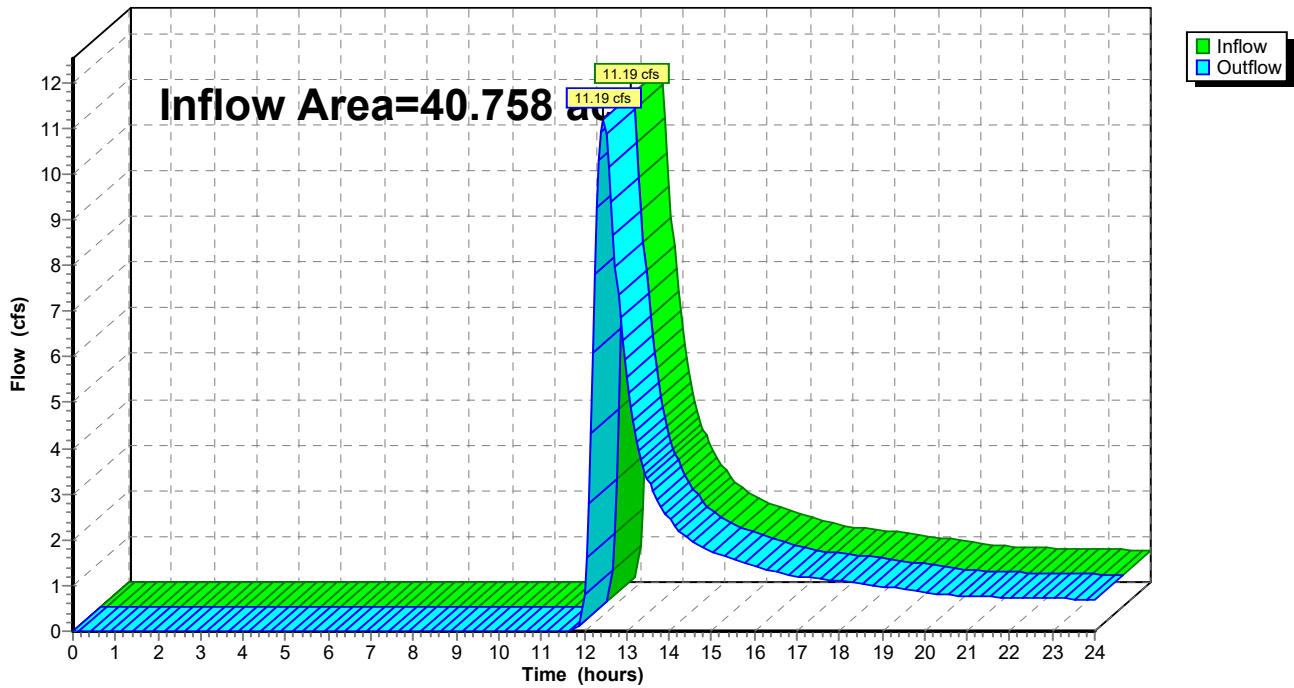
Summary for Reach DL-2: DL-2

Inflow Area = 40.758 ac, 0.00% Impervious, Inflow Depth > 0.54" for 10-Year event
Inflow = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af
Outflow = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph



Existing Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

Prepared by C T Male Associates

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1E: EX DA-1

Runoff Area=66.302 ac 0.69% Impervious Runoff Depth>2.04"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=82.54 cfs 11.280 af

Subcatchment2E: EX DA-2

Runoff Area=40.758 ac 0.00% Impervious Runoff Depth>1.88"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=51.36 cfs 6.394 af

Reach DL-1: DL-1

Inflow=82.54 cfs 11.280 af
Outflow=82.54 cfs 11.280 af

Reach DL-2: DL-2

Inflow=51.36 cfs 6.394 af
Outflow=51.36 cfs 6.394 af

Existing Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

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Summary for Subcatchment 1E: EX DA-1

Runoff = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af, Depth> 2.04"
 Routed to Reach DL-1 : DL-1

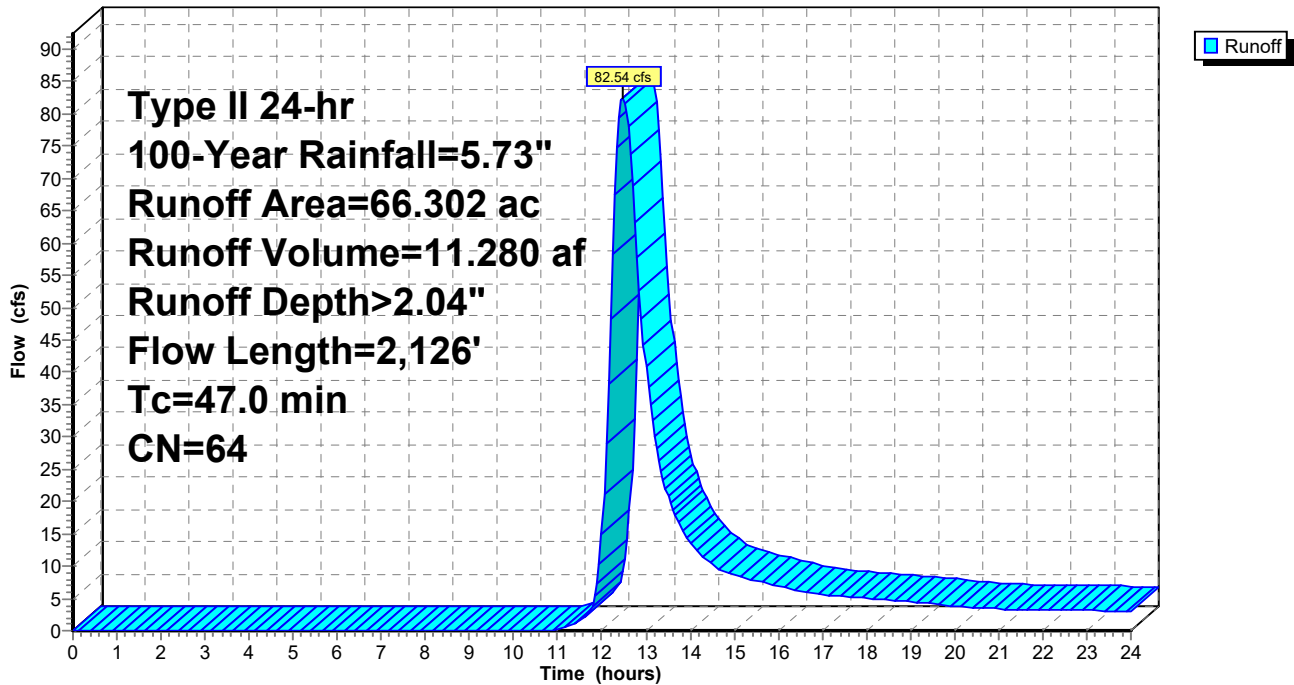
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-Year Rainfall=5.73"

Area (ac)	CN	Description
* 0.460	98	Impervious Farm Road, HSG D
45.497	58	Meadow, non-grazed, HSG B
* 20.345	78	Meadow, non-grazed, HSG D
66.302	64	Weighted Average
65.842		99.31% Pervious Area
0.460		0.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1E: EX DA-1

Hydrograph



Existing Conditions - Lansing Solar

Prepared by C T Male Associates

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Type II 24-hr 100-Year Rainfall=5.73"

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Summary for Subcatchment 2E: EX DA-2

Runoff = 51.36 cfs @ 12.40 hrs, Volume= 6.394 af, Depth> 1.88"
 Routed to Reach DL-2 : DL-2

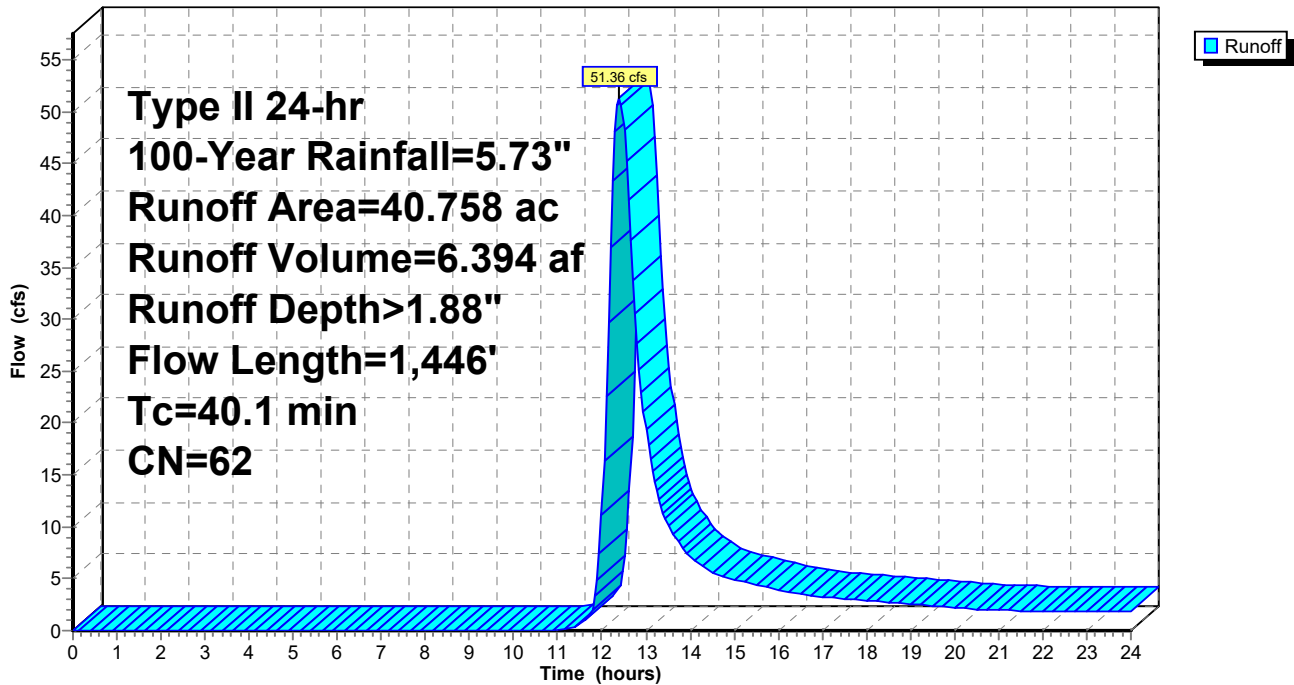
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-Year Rainfall=5.73"

Area (ac)	CN	Description
32.443	58	Meadow, non-grazed, HSG B
8.315	78	Meadow, non-grazed, HSG D
40.758	62	Weighted Average
40.758		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2E: EX DA-2

Hydrograph



Existing Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

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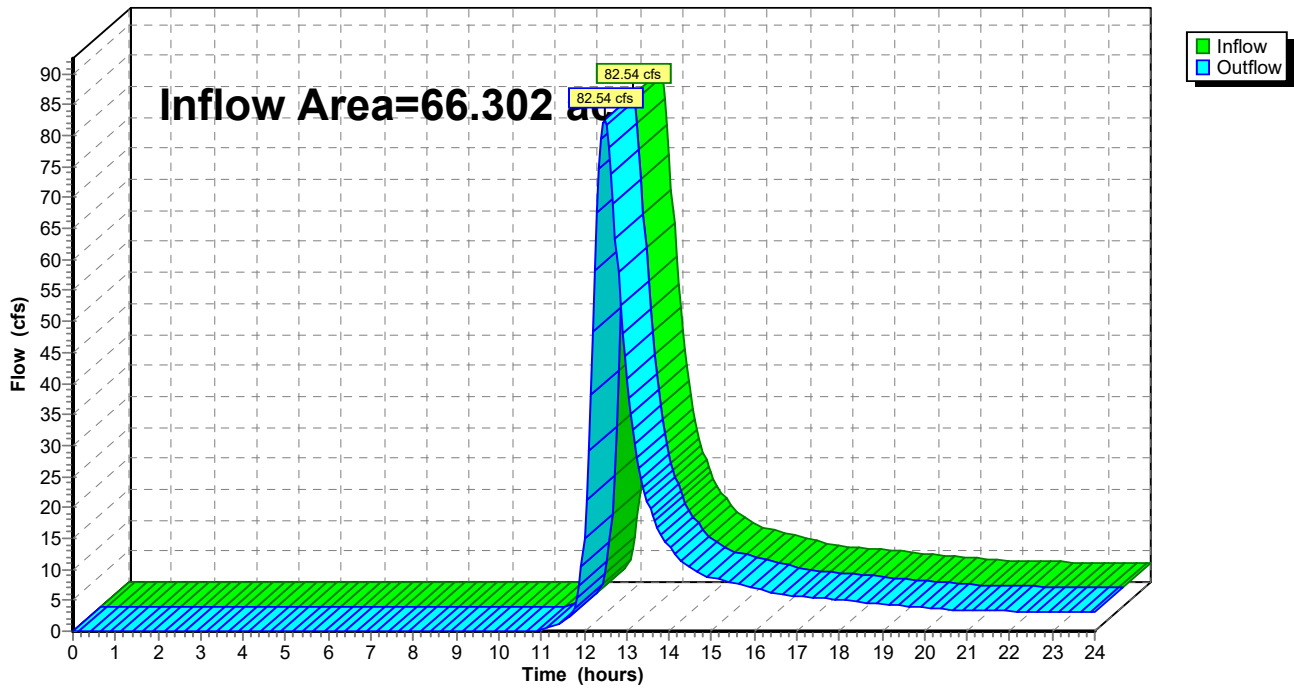
Summary for Reach DL-1: DL-1

Inflow Area = 66.302 ac, 0.69% Impervious, Inflow Depth > 2.04" for 100-Year event
Inflow = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af
Outflow = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Existing Conditions - Lansing Solar

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Type II 24-hr 100-Year Rainfall=5.73"

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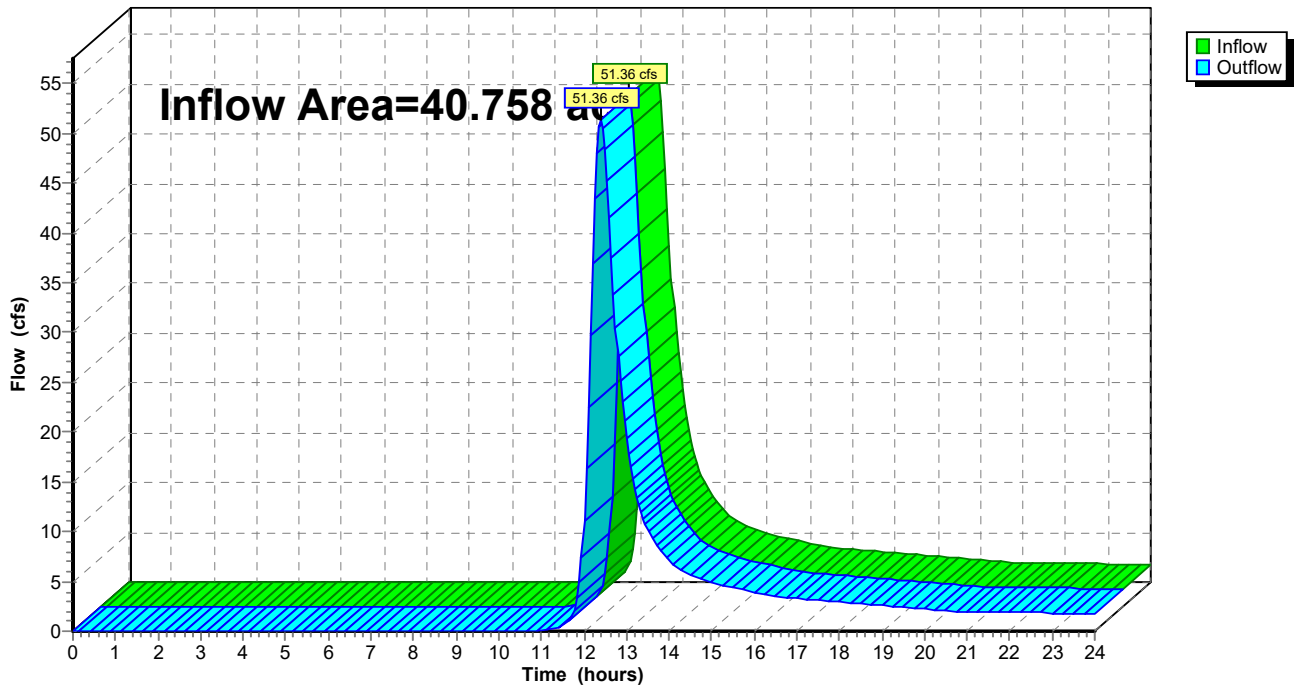
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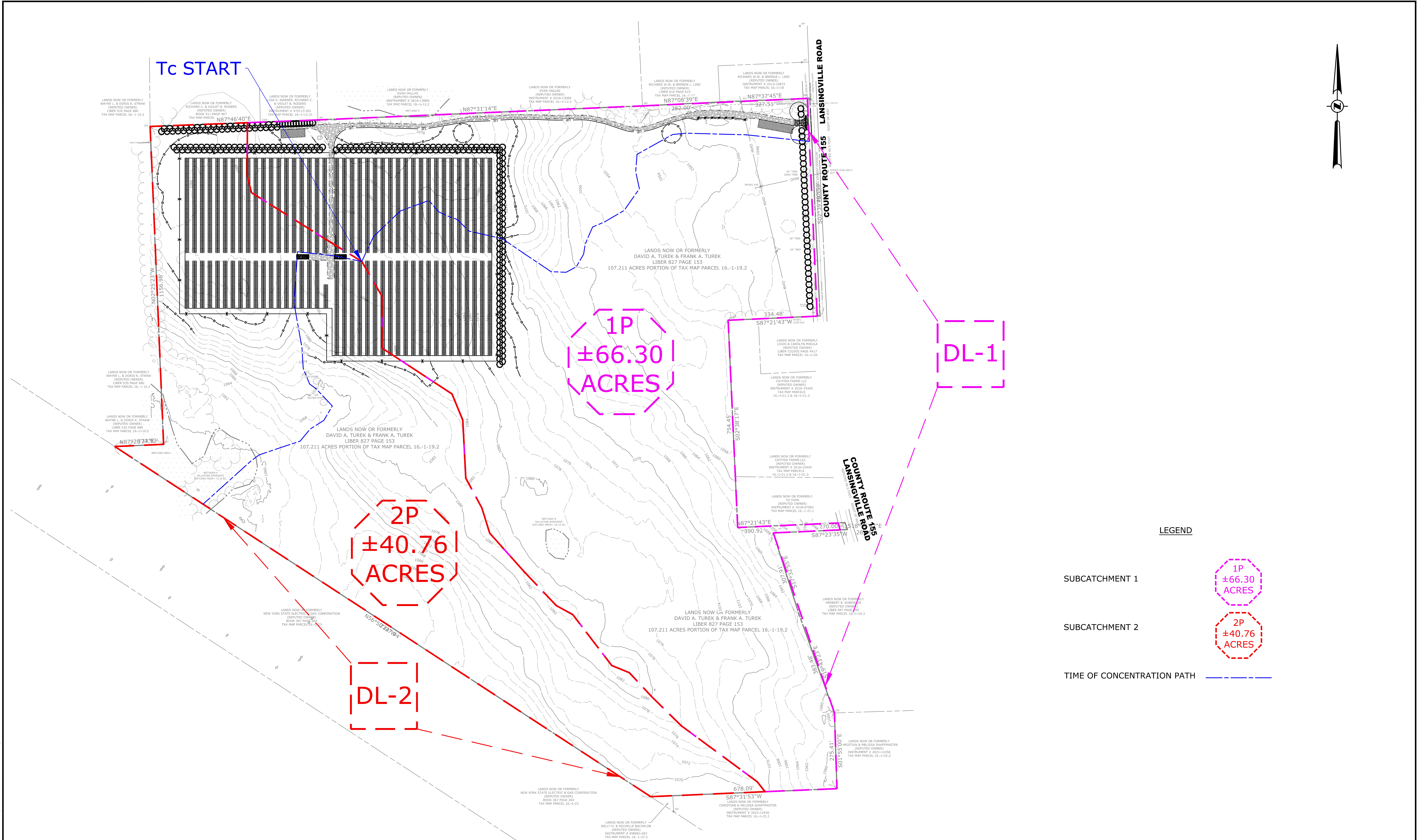
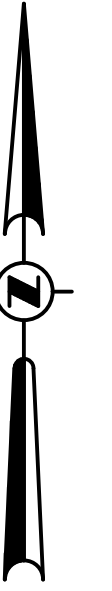
Inflow Area = 40.758 ac, 0.00% Impervious, Inflow Depth > 1.88" for 100-Year event
Inflow = 51.36 cfs @ 12.40 hrs, Volume= 6.394 af
Outflow = 51.36 cfs @ 12.40 hrs, Volume= 6.394 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph





LEGEND

SUBCATCHMENT 1

1P
±66.30
ACRES

SUBCATCHMENT 2

2P
±40.76
ACRES

TIME OF CONCENTRATION PATH



DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

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 DESIGNED: OKS
 DRAFTED: BFJ
 CHECKED: MLS
 PROJ. NO : 22.2303
 SCALE : 1"=150'
 DATE : MARCH 23, 2023

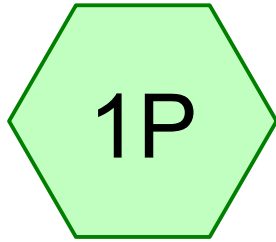
PROPOSED DRAINAGE CONDITIONS

LANSING COMMUNITY SOLAR PROJECT, LLC.
GENIE SOLAR ENERGY

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

C.T. MALE ASSOCIATES
 Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
 50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
 GLENS FALLS, NY • Poughkeepsie, NY
 JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
 www.ctmale.com

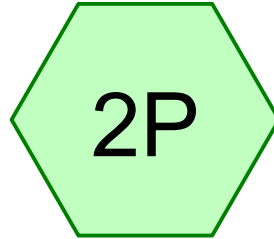
DRP
 SHEET 1 OF 1
 DWG. NO.:



PR DA-1



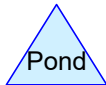
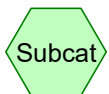
DL-1



PR DA-2



DL-2



Proposed Conditions - Lansing Solar

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type II 24-hr		Default	24.00	1	1.97	2
2	10-Year	Type II 24-hr		Default	24.00	1	3.36	2
3	100-Year	Type II 24-hr		Default	24.00	1	5.73	2

Proposed Conditions - Lansing Solar

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.022	98	Concrete Pads, HSG D (2P)
77.551	58	Meadow, non-grazed, HSG B (1P, 2P)
28.509	78	Meadow, non-grazed, HSG D (1P, 2P)
0.681	85	Pervious Gravel road, HSG B (1P, 2P)
0.287	91	Pervious Gravel road, HSG D (1P, 2P)
0.010	91	Stone Diaphragms, HSG D (2P)

Proposed Conditions - Lansing Solar

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
78.232	HSG B	1P, 2P
0.000	HSG C	
28.828	HSG D	1P, 2P
0.000	Other	

Proposed Conditions - Lansing Solar

Type II 24-hr 1-Year Rainfall=1.97"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1P: PR DA-1

Runoff Area=66.303 ac 0.00% Impervious Runoff Depth>0.11"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=1.41 cfs 0.589 af

Subcatchment2P: PR DA-2

Runoff Area=40.757 ac 0.05% Impervious Runoff Depth>0.08"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=0.49 cfs 0.265 af

Reach DL-1: DL-1

Inflow=1.41 cfs 0.589 af
Outflow=1.41 cfs 0.589 af

Reach DL-2: DL-2

Inflow=0.49 cfs 0.265 af
Outflow=0.49 cfs 0.265 af

Proposed Conditions - Lansing Solar

Type II 24-hr 1-Year Rainfall=1.97"

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Summary for Subcatchment 1P: PR DA-1

Runoff = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af, Depth> 0.11"
 Routed to Reach DL-1 : DL-1

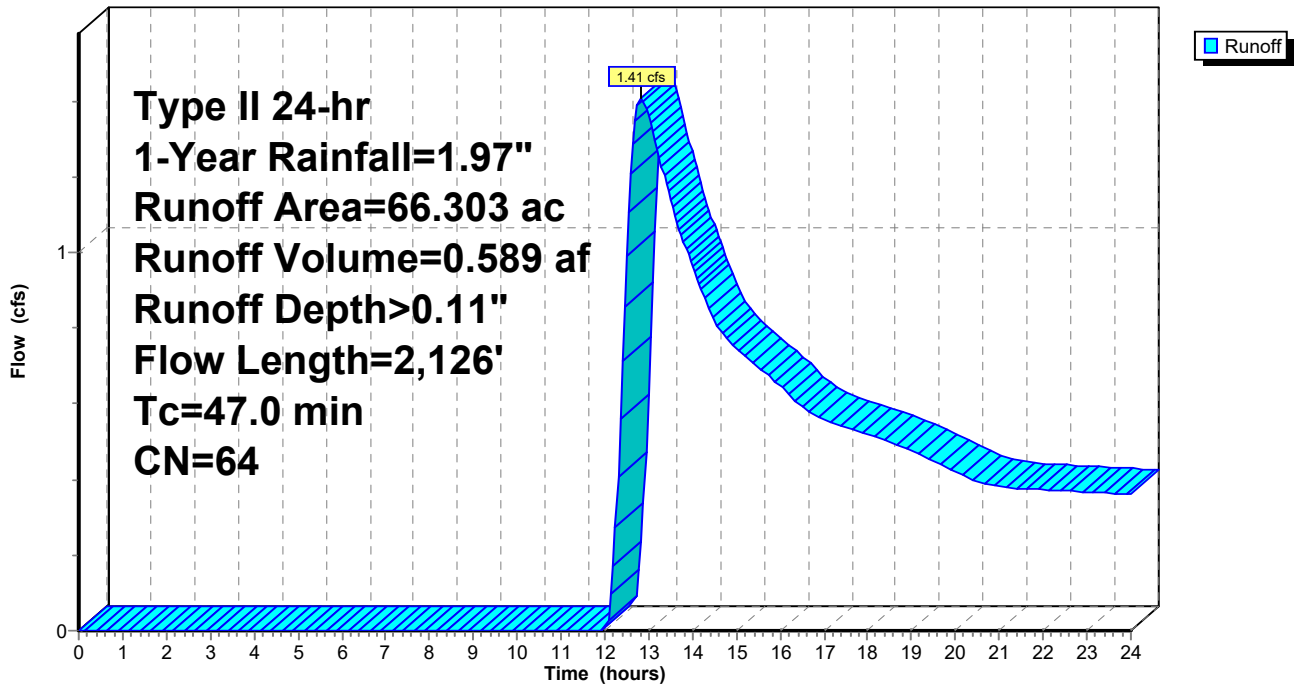
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-Year Rainfall=1.97"

Area (ac)	CN	Description
45.225	58	Meadow, non-grazed, HSG B
20.224	78	Meadow, non-grazed, HSG D
* 0.590	85	Pervious Gravel road, HSG B
* 0.264	91	Pervious Gravel road, HSG D
66.303	64	Weighted Average
66.303		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1P: PR DA-1

Hydrograph



Proposed Conditions - Lansing Solar

Type II 24-hr 1-Year Rainfall=1.97"

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Summary for Subcatchment 2P: PR DA-2

Runoff = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af, Depth> 0.08"
 Routed to Reach DL-2 : DL-2

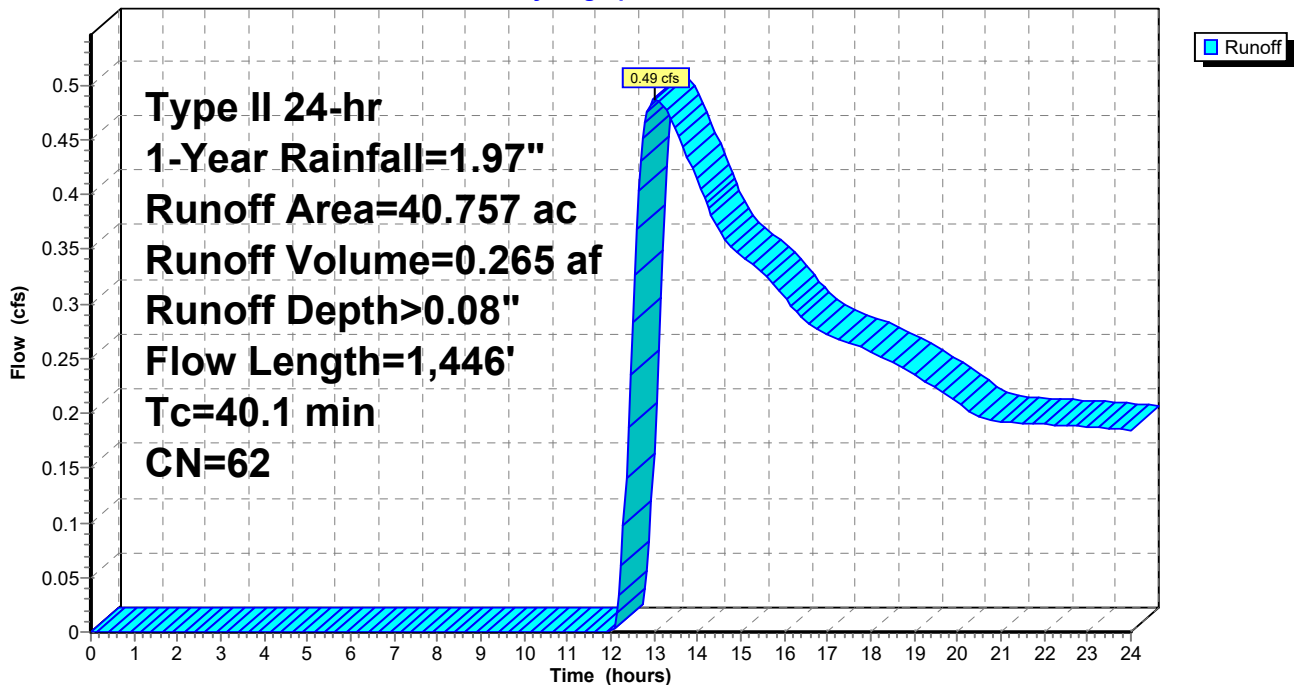
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-Year Rainfall=1.97"

Area (ac)	CN	Description
32.326	58	Meadow, non-grazed, HSG B
8.285	78	Meadow, non-grazed, HSG D
* 0.091	85	Pervious Gravel road, HSG B
* 0.023	91	Pervious Gravel road, HSG D
* 0.022	98	Concrete Pads, HSG D
* 0.010	91	Stone Diaphragms, HSG D
40.757	62	Weighted Average
40.735		99.95% Pervious Area
0.022		0.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2P: PR DA-2

Hydrograph



Proposed Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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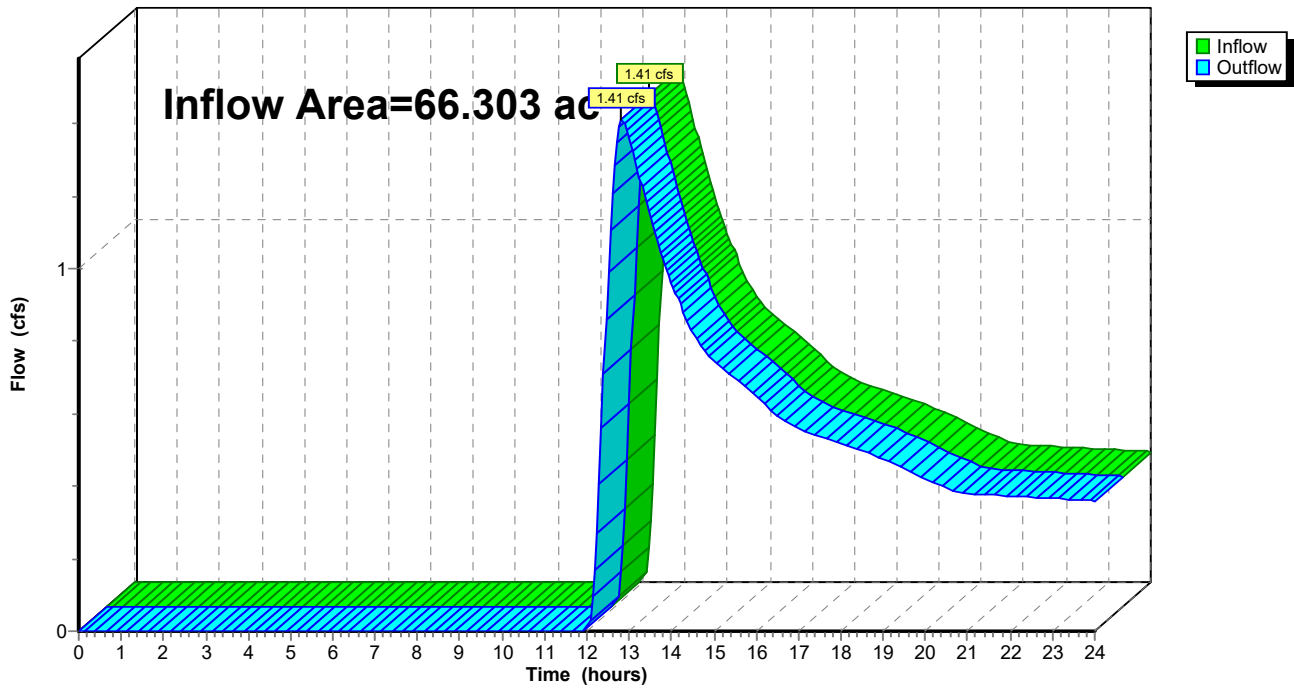
Summary for Reach DL-1: DL-1

Inflow Area = 66.303 ac, 0.00% Impervious, Inflow Depth > 0.11" for 1-Year event
Inflow = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af
Outflow = 1.41 cfs @ 12.82 hrs, Volume= 0.589 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Proposed Conditions - Lansing Solar

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Type II 24-hr 1-Year Rainfall=1.97"

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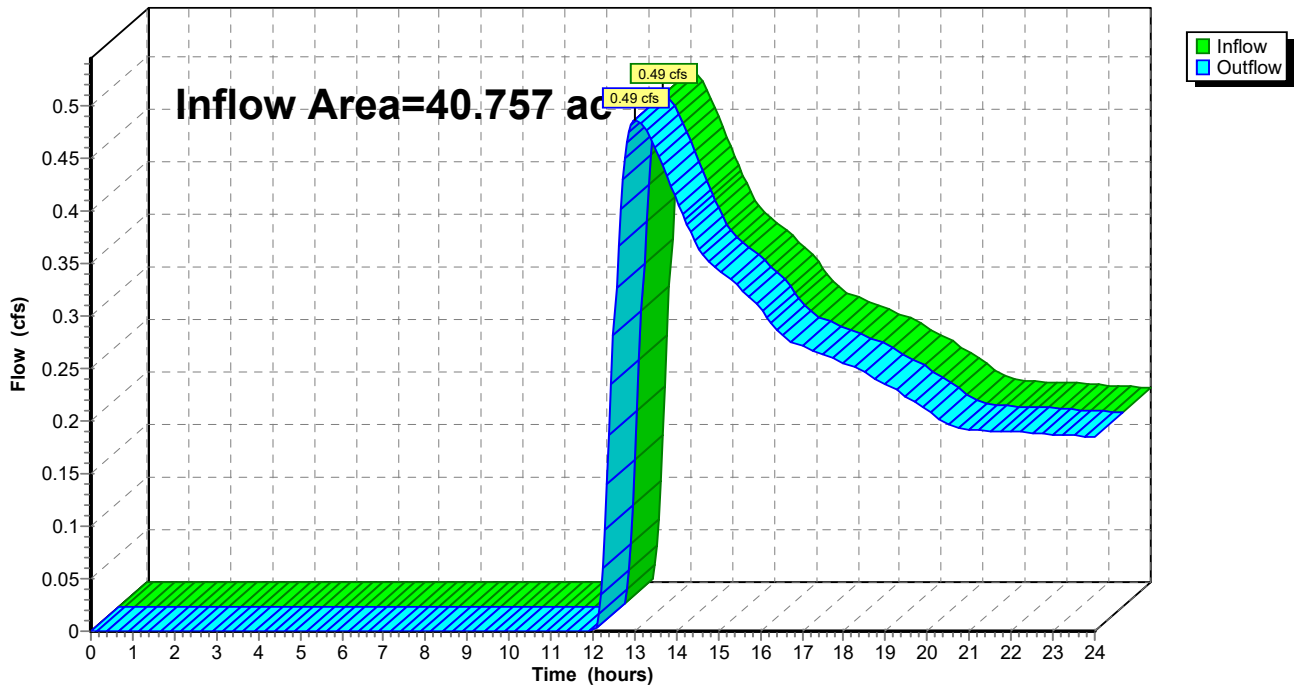
Summary for Reach DL-2: DL-2

Inflow Area = 40.757 ac, 0.05% Impervious, Inflow Depth > 0.08" for 1-Year event
Inflow = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af
Outflow = 0.49 cfs @ 13.03 hrs, Volume= 0.265 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph



Proposed Conditions - Lansing Solar

Type II 24-hr 10-Year Rainfall=3.36"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1P: PR DA-1

Runoff Area=66.303 ac 0.00% Impervious Runoff Depth>0.62"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=20.14 cfs 3.440 af

Subcatchment2P: PR DA-2

Runoff Area=40.757 ac 0.05% Impervious Runoff Depth>0.54"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=11.19 cfs 1.838 af

Reach DL-1: DL-1

Inflow=20.14 cfs 3.440 af
Outflow=20.14 cfs 3.440 af

Reach DL-2: DL-2

Inflow=11.19 cfs 1.838 af
Outflow=11.19 cfs 1.838 af

Proposed Conditions - Lansing Solar

Type II 24-hr 10-Year Rainfall=3.36"

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Summary for Subcatchment 1P: PR DA-1

Runoff = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af, Depth> 0.62"
 Routed to Reach DL-1 : DL-1

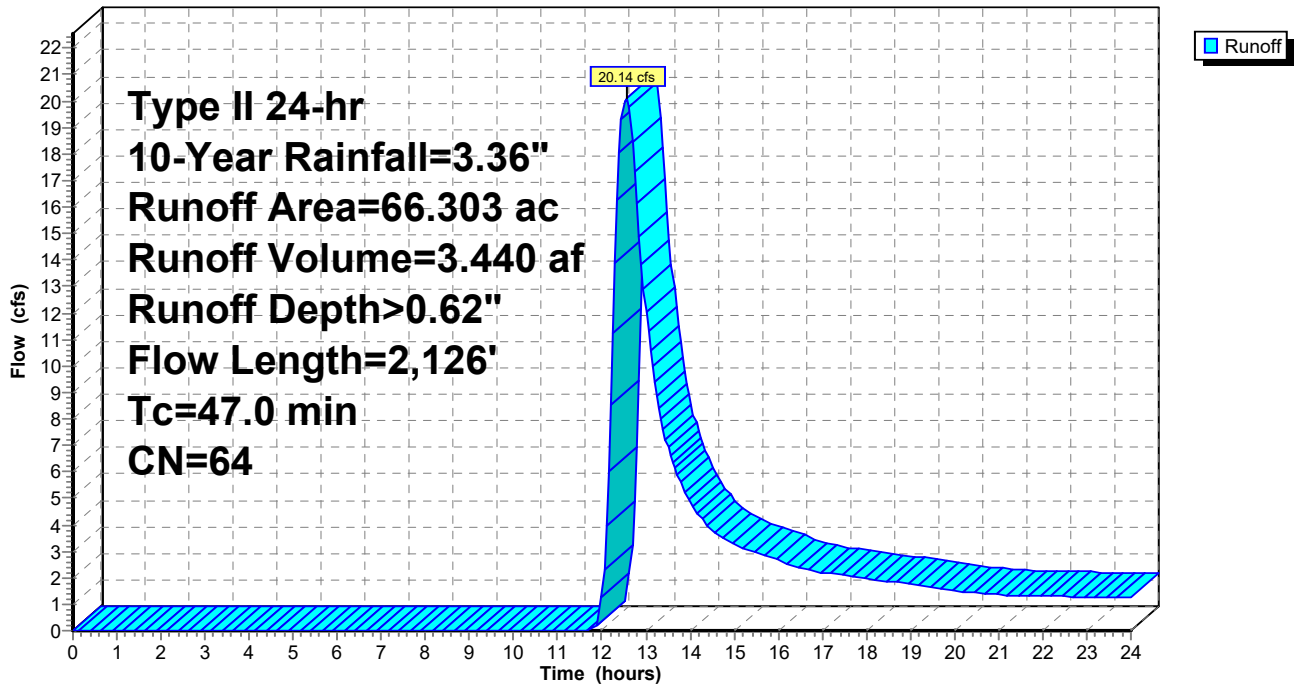
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-Year Rainfall=3.36"

Area (ac)	CN	Description
45.225	58	Meadow, non-grazed, HSG B
20.224	78	Meadow, non-grazed, HSG D
* 0.590	85	Pervious Gravel road, HSG B
* 0.264	91	Pervious Gravel road, HSG D
66.303	64	Weighted Average
66.303		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1P: PR DA-1

Hydrograph



Proposed Conditions - Lansing Solar

Type II 24-hr 10-Year Rainfall=3.36"

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Summary for Subcatchment 2P: PR DA-2

Runoff = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af, Depth> 0.54"
 Routed to Reach DL-2 : DL-2

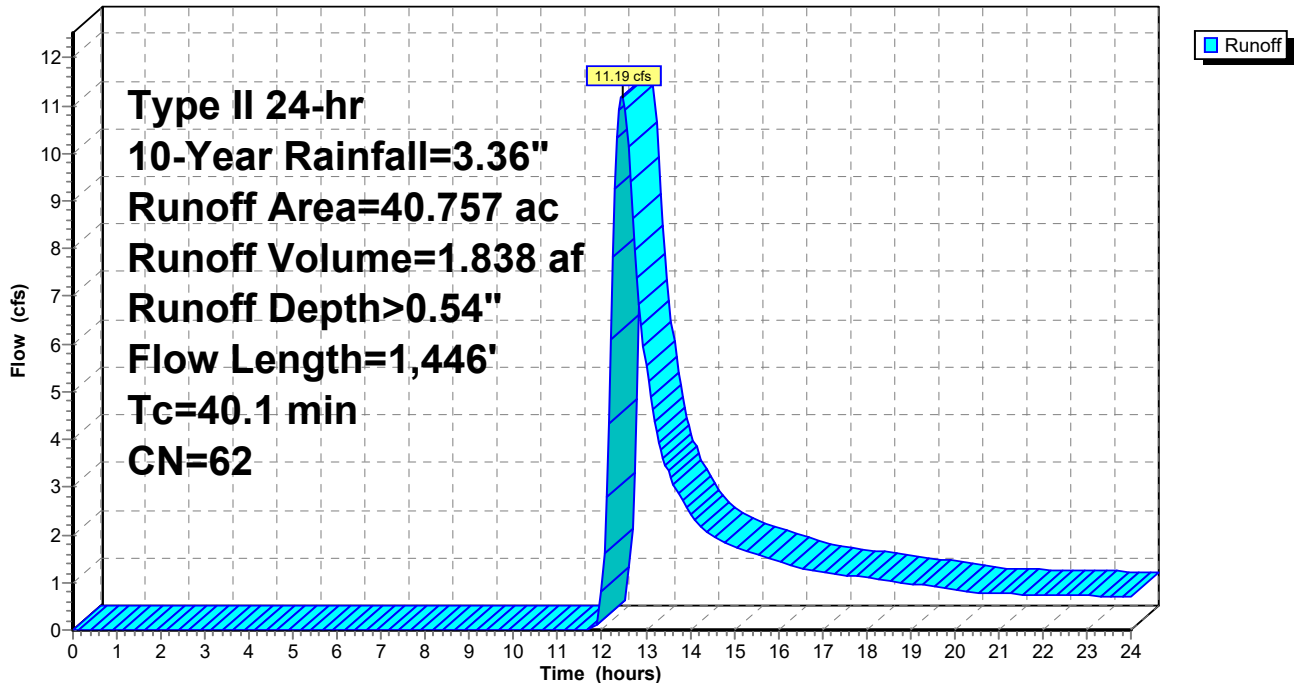
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-Year Rainfall=3.36"

Area (ac)	CN	Description
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8.285	78	Meadow, non-grazed, HSG D
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* 0.023	91	Pervious Gravel road, HSG D
* 0.022	98	Concrete Pads, HSG D
* 0.010	91	Stone Diaphragms, HSG D
40.757	62	Weighted Average
40.735		99.95% Pervious Area
0.022		0.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2P: PR DA-2

Hydrograph



Proposed Conditions - Lansing Solar

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Type II 24-hr 10-Year Rainfall=3.36"

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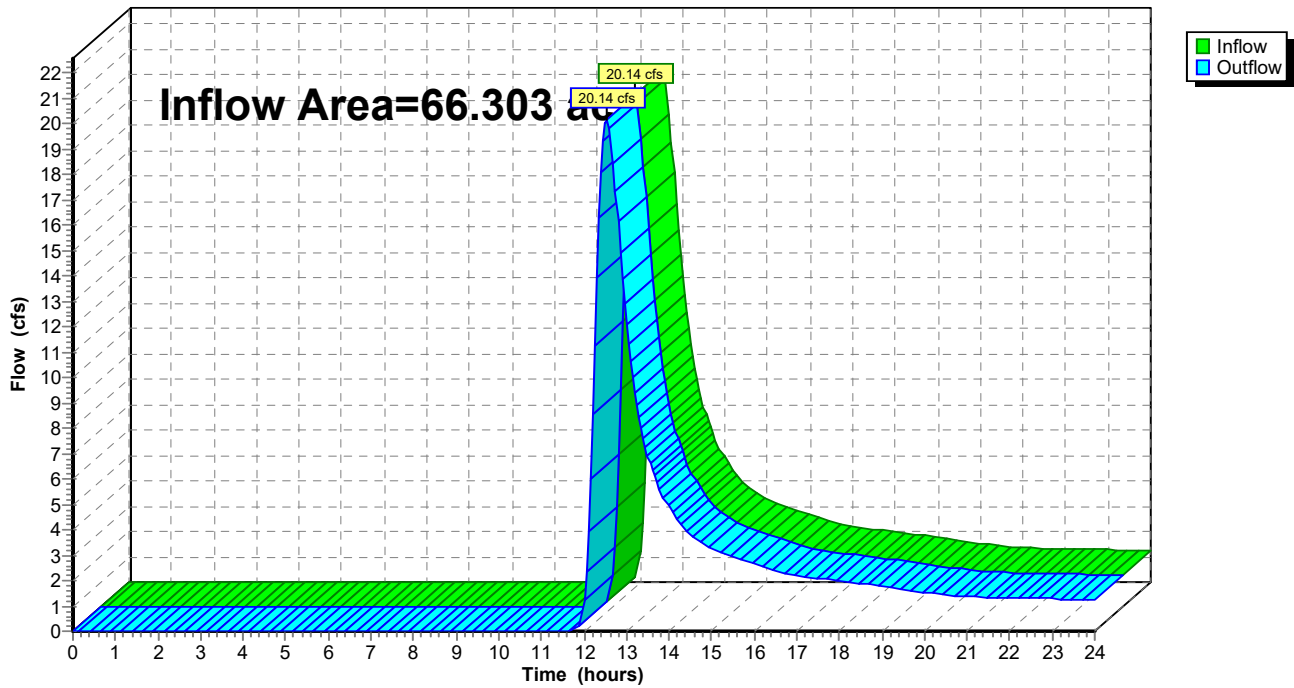
Summary for Reach DL-1: DL-1

Inflow Area = 66.303 ac, 0.00% Impervious, Inflow Depth > 0.62" for 10-Year event
Inflow = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af
Outflow = 20.14 cfs @ 12.55 hrs, Volume= 3.440 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Proposed Conditions - Lansing Solar

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Type II 24-hr 10-Year Rainfall=3.36"

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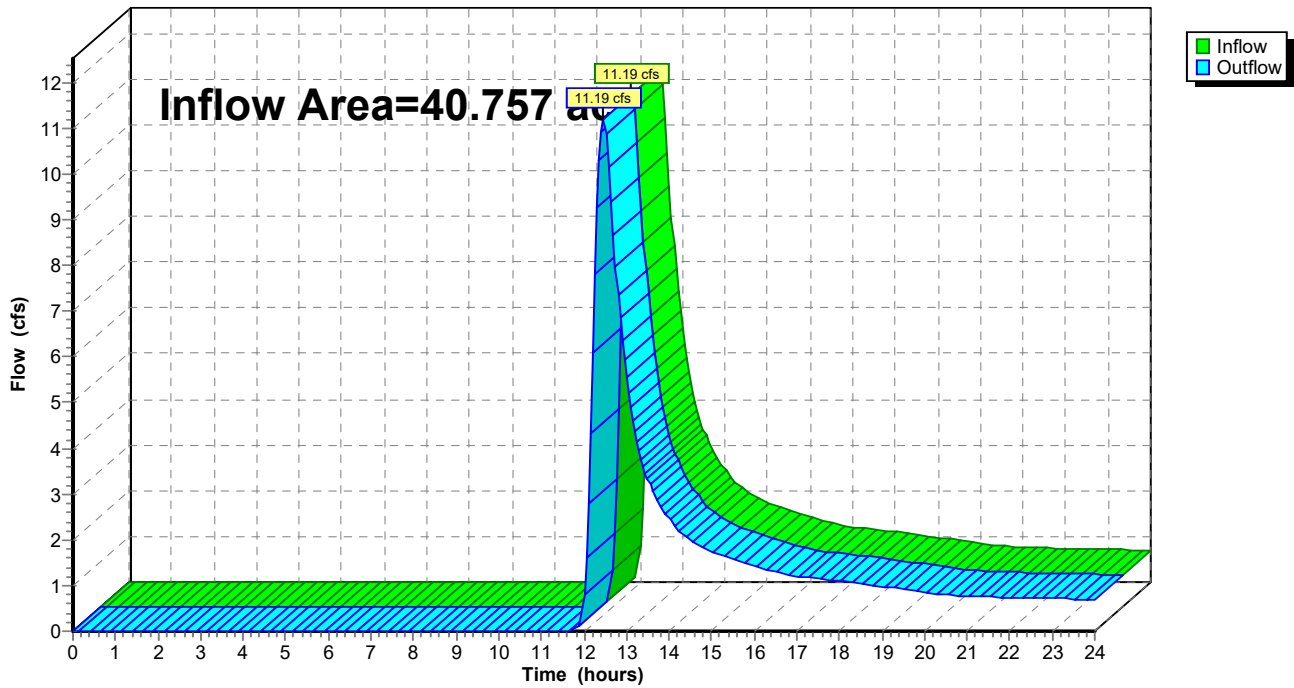
Summary for Reach DL-2: DL-2

Inflow Area = 40.757 ac, 0.05% Impervious, Inflow Depth > 0.54" for 10-Year event
Inflow = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af
Outflow = 11.19 cfs @ 12.46 hrs, Volume= 1.838 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph



Proposed Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1P: PR DA-1

Runoff Area=66.303 ac 0.00% Impervious Runoff Depth>2.04"
Flow Length=2,126' Tc=47.0 min CN=64 Runoff=82.54 cfs 11.280 af

Subcatchment2P: PR DA-2

Runoff Area=40.757 ac 0.05% Impervious Runoff Depth>1.88"
Flow Length=1,446' Tc=40.1 min CN=62 Runoff=51.35 cfs 6.394 af

Reach DL-1: DL-1

Inflow=82.54 cfs 11.280 af
Outflow=82.54 cfs 11.280 af

Reach DL-2: DL-2

Inflow=51.35 cfs 6.394 af
Outflow=51.35 cfs 6.394 af

Proposed Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

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Summary for Subcatchment 1P: PR DA-1

Runoff = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af, Depth> 2.04"
 Routed to Reach DL-1 : DL-1

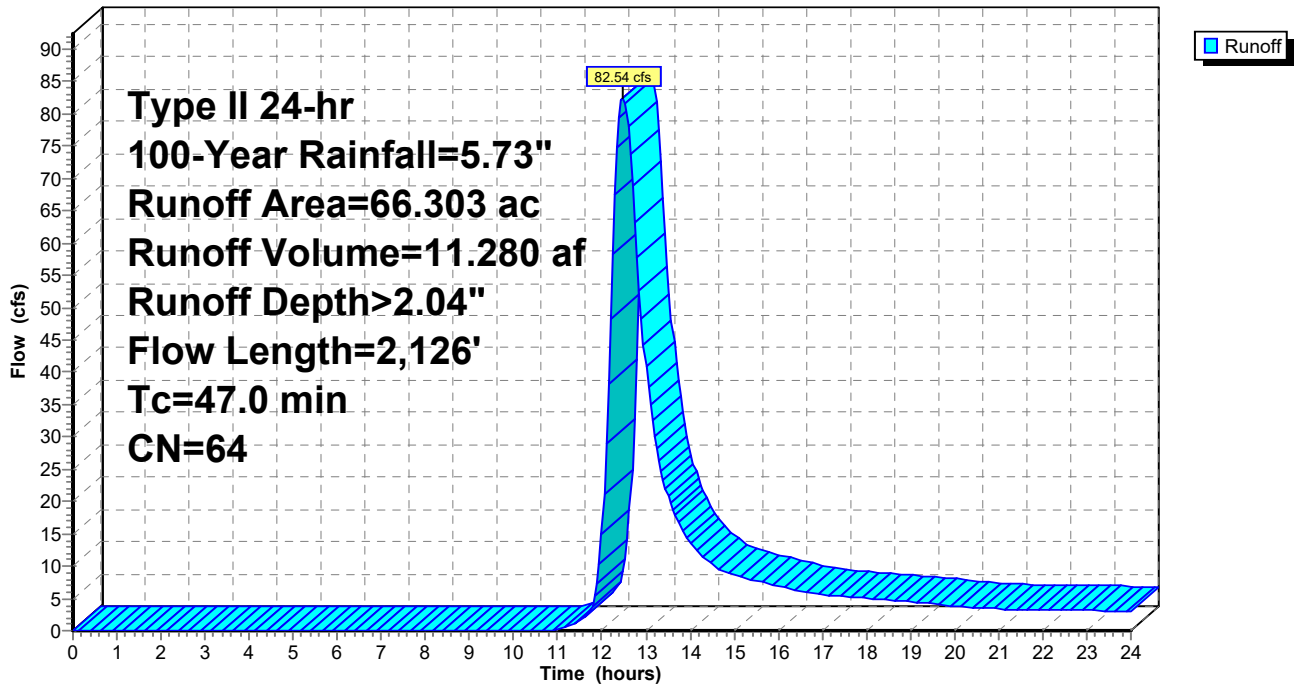
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-Year Rainfall=5.73"

Area (ac)	CN	Description
45.225	58	Meadow, non-grazed, HSG B
20.224	78	Meadow, non-grazed, HSG D
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* 0.264	91	Pervious Gravel road, HSG D
66.303	64	Weighted Average
66.303		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0126	0.12		Sheet Flow, 100-ft Sheet Flow
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		Shallow Concentrated Flow, Shallow Concentrated Flow
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

Subcatchment 1P: PR DA-1

Hydrograph



Proposed Conditions - Lansing Solar

Type II 24-hr 100-Year Rainfall=5.73"

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Summary for Subcatchment 2P: PR DA-2

Runoff = 51.35 cfs @ 12.40 hrs, Volume= 6.394 af, Depth> 1.88"
 Routed to Reach DL-2 : DL-2

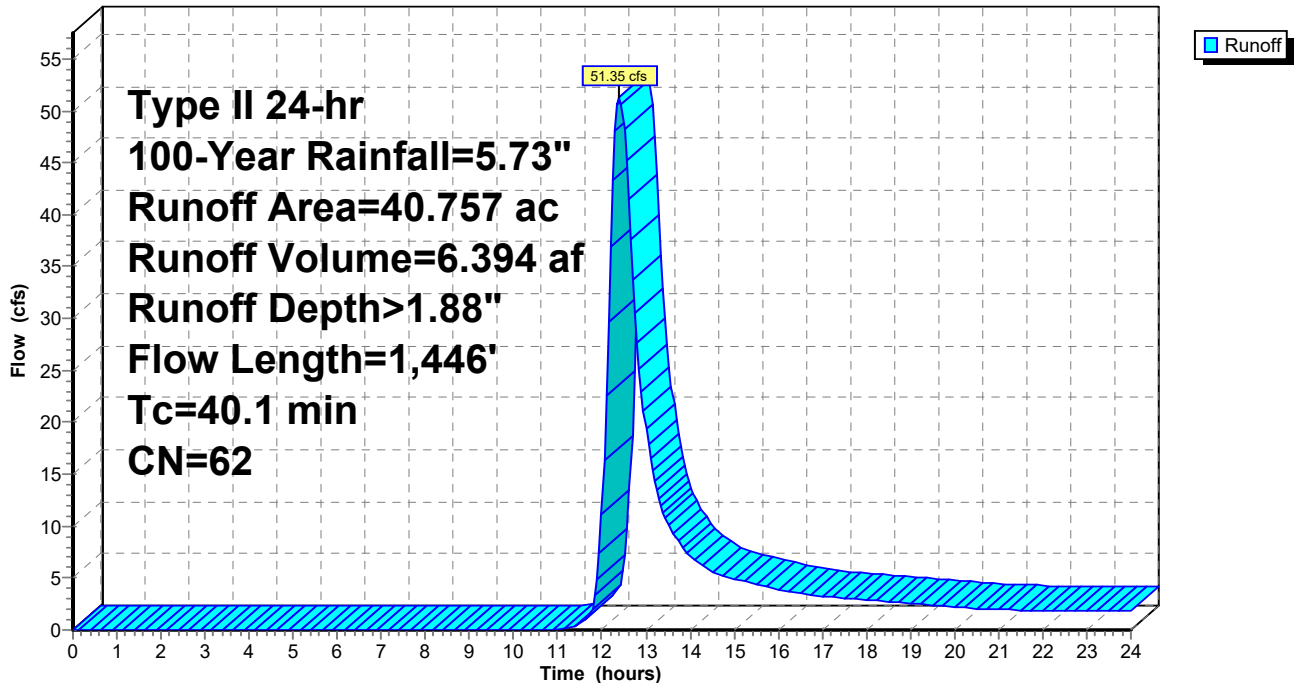
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-Year Rainfall=5.73"

Area (ac)	CN	Description
32.326	58	Meadow, non-grazed, HSG B
8.285	78	Meadow, non-grazed, HSG D
* 0.091	85	Pervious Gravel road, HSG B
* 0.023	91	Pervious Gravel road, HSG D
* 0.022	98	Concrete Pads, HSG D
* 0.010	91	Stone Diaphragms, HSG D
40.757	62	Weighted Average
40.735		99.95% Pervious Area
0.022		0.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0062	0.09		Sheet Flow, 100-ft Sheet Flow Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		Shallow Concentrated Flow, Shallow Concentrated Flow Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

Subcatchment 2P: PR DA-2

Hydrograph



Proposed Conditions - Lansing Solar

Prepared by C T Male Associates

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Type II 24-hr 100-Year Rainfall=5.73"

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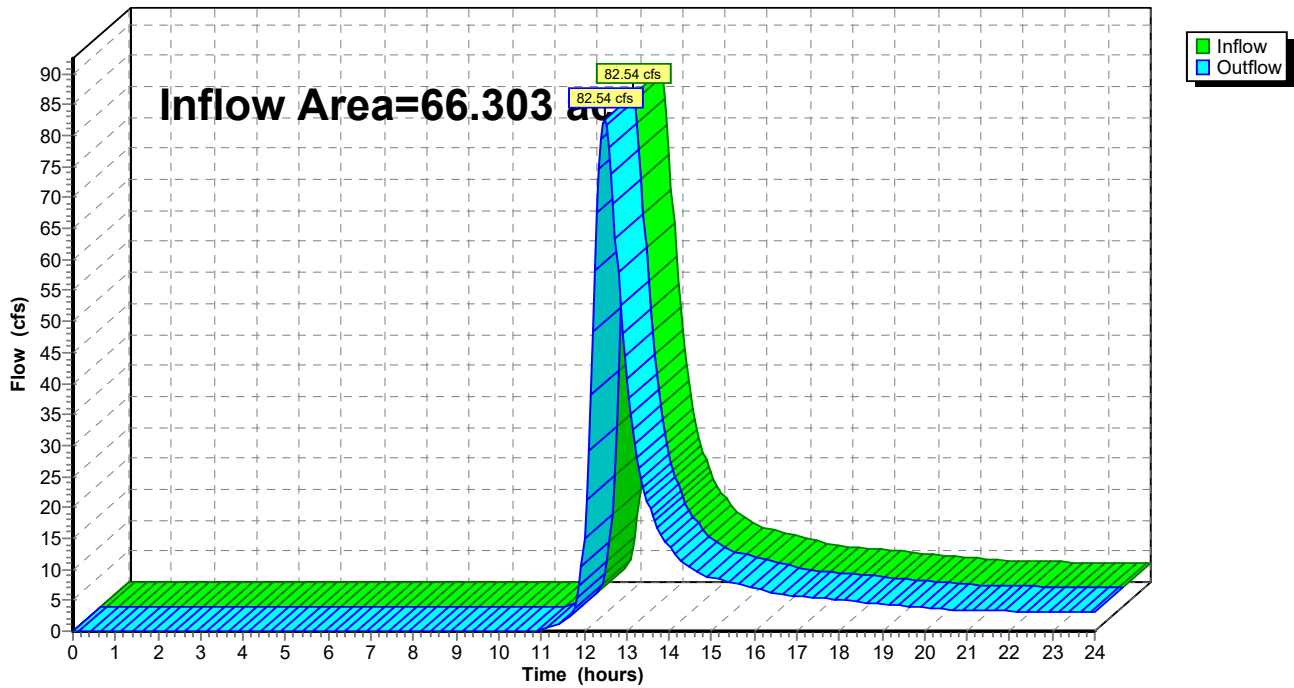
Summary for Reach DL-1: DL-1

Inflow Area = 66.303 ac, 0.00% Impervious, Inflow Depth > 2.04" for 100-Year event
Inflow = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af
Outflow = 82.54 cfs @ 12.48 hrs, Volume= 11.280 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-1: DL-1

Hydrograph



Proposed Conditions - Lansing Solar

Prepared by C T Male Associates

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Type II 24-hr 100-Year Rainfall=5.73"

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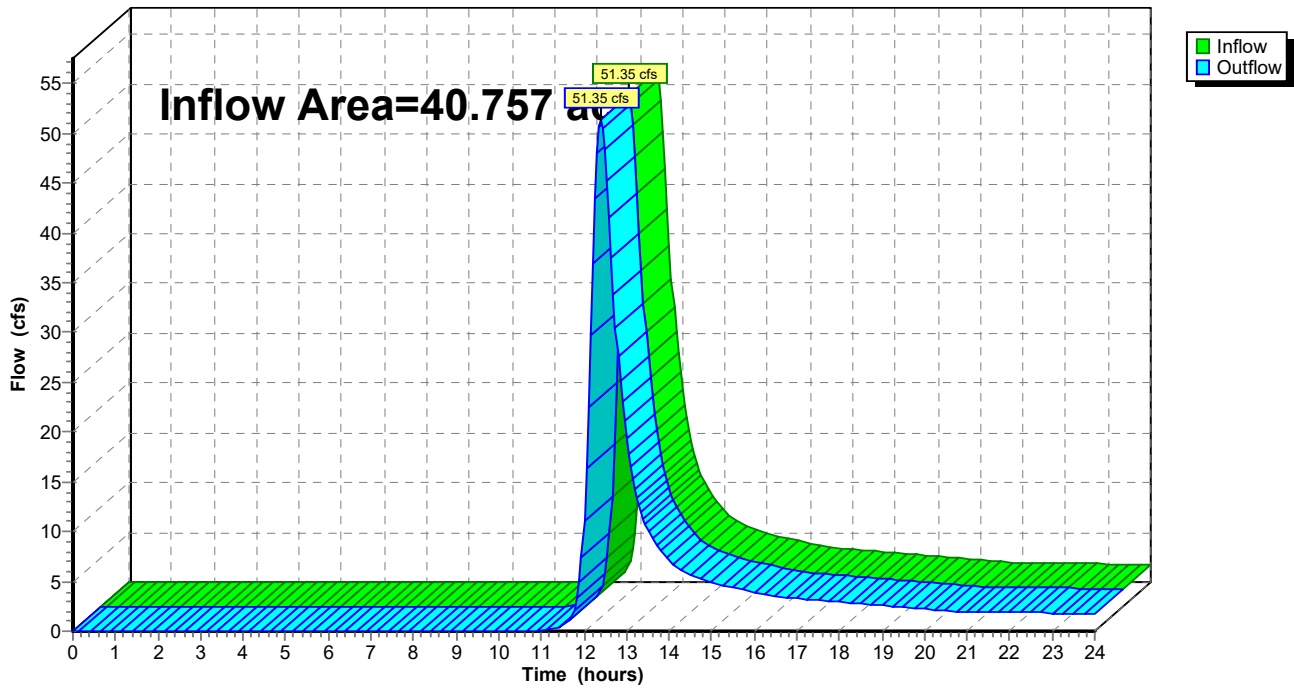
Summary for Reach DL-2: DL-2

Inflow Area = 40.757 ac, 0.05% Impervious, Inflow Depth > 1.88" for 100-Year event
Inflow = 51.35 cfs @ 12.40 hrs, Volume= 6.394 af
Outflow = 51.35 cfs @ 12.40 hrs, Volume= 6.394 af, Atten= 0%, Lag= 0.0 min

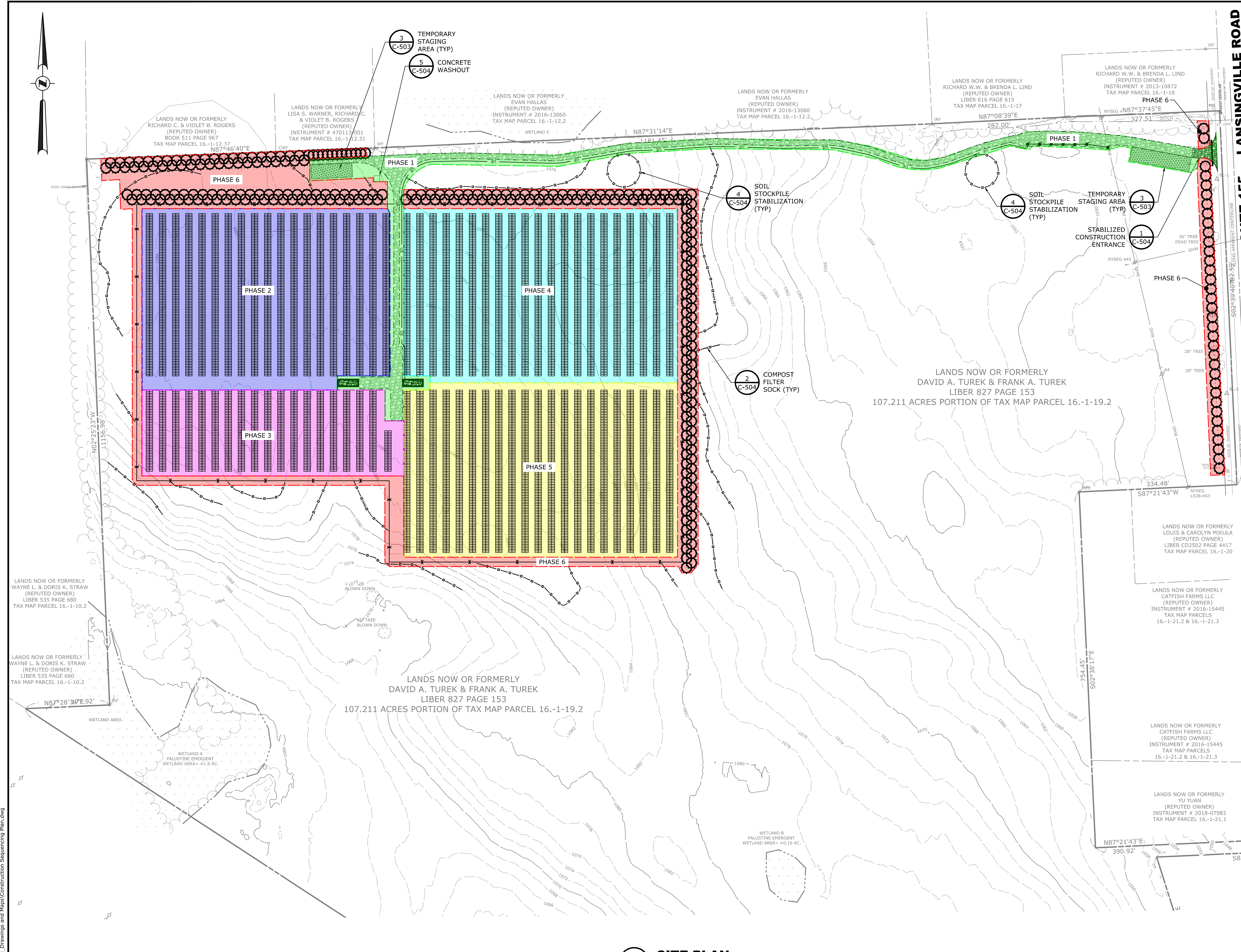
Routing by Stor-Ind+Trans method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Reach DL-2: DL-2

Hydrograph



APPENDIX F
Construction Sequencing Plan



- CONSTRUCTION SEQUENCE PLAN:**
- TOTAL DISTURBANCE = ±22.53 ACRES
- PHASE 1:** INSTALL EROSION AND SEDIMENT CONTROL MEASURES, CLEAR VEGETATION FOR AND INSTALL THE GRAVEL ACCESS ROAD, INSTALL ELECTRICAL CONDUIT AND CONCRETE EQUIPMENT PADS. TOTAL DISTURBANCE = ±1.78 ACRES
- INSTALL ESC MEASURES, INCLUDING STABILIZED CONSTRUCTION ACCESS, SILT FENCE, COMPOST FILTER SOCK, AND CONCRETE WASHOUT. TIMBER MATTING SHALL BE UTILIZED IN AREAS OF PONDED WATER OR SATURATED AREAS DURING CLEARING OR CONSTRUCTION OF THE ACCESS ROAD
 - CLEAR VEGETATIVE COVER IN THE AREA ILLUSTRATED AS "PHASE 1"
 - CONSTRUCT THE GRAVEL ACCESS ROAD IN CONFORMANCE WITH ALL ASSOCIATES DETAILS AND NOTES.
 - INSTALL UNDERGROUND ELECTRICAL CONDUIT.
 - FORM AND POUR CONCRETE EQUIPMENT PAD. SET ELECTRICAL EQUIPMENT ONTO CONCRETE PADS.
- PHASE 2:** INSTALL RACKING, PANELS AND ELECTRICAL CONDUIT. TOTAL DISTURBANCE = ±4.54 ACRES
- INSTALL RACKING. RACKING INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL PANELS. PANEL INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL UNDERGROUND ELECTRICAL CONDUIT.
- PHASE 3:** INSTALL RACKING, PANELS AND ELECTRICAL CONDUIT. TOTAL DISTURBANCE = ±2.26 ACRES
- INSTALL RACKING. RACKING INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL PANELS. PANEL INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL UNDERGROUND ELECTRICAL CONDUIT.
- PHASE 4:** INSTALL RACKING, PANELS, AND ELECTRICAL CONDUIT. TOTAL DISTURBANCE = ±4.89 ACRES
- INSTALL RACKING. RACKING INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL PANELS. PANEL INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL UNDERGROUND ELECTRICAL CONDUIT.
- PHASE 5:** INSTALL RACKING, PANELS, AND ELECTRICAL CONDUIT. TOTAL DISTURBANCE = ±4.89 ACRES
- INSTALL RACKING. RACKING INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL PANELS. PANEL INSTALLATION MAY BE PERFORMED AT THE CONTRACTOR'S DISCRETION.
 - INSTALL UNDERGROUND ELECTRICAL CONDUIT.
- PHASE 6:** INSTALL CHAINLINK FENCE AND SITE LANDSCAPING. TOTAL DISTURBANCE = ±4.17 ACRES
- INSTALL PERIMETER CHAINLINK FENCE.
 - INSTALL LANDSCAPING AS SPECIFIED IN THE PLANS.
- NOTES:**
- ALL WORK IN ALL PHASES IS TO OCCUR IN INCREMENTS, SO THAT AREAS OF DISTURBANCE DOES NOT EXCEED 5 ACRES AT ANY GIVEN TIME. THE AREA(S) OF WORK IS AT THE CONTRACTOR'S DISCRETION. EACH <5 ACRE AREA OF DISTURBED LAND SHALL BE TEMPORARILY STABILIZED PRIOR TO MOVING ONTO THE NEXT AREA OF DISTURBANCE. TEMPORARY STABILIZATION MAY UTILIZE SEED & STRAW OR WOOD MULCH/CHIPS. THE CONTRACTOR MAY OBTAIN A 5 ACRE WAIVER FROM THE REGIONAL DEC OFFICE IF DESIRED.
 - ALL WORK, IN ALL PHASES, PERFORMED WITHIN PONDED AREAS AND/OR SATURATED AREAS SHALL UTILIZE TIMBER MATTING.

LEGEND

	PHASE 1 = ±1.78 ACRES		EXISTING FEATURES
	PHASE 2 = ±4.54 ACRES		IRON ROD FOUND
	PHASE 3 = ±2.26 ACRES		IRON PIPE FOUND
	PHASE 4 = ±4.89 ACRES		CAPPED IRON ROD FOUND
	PHASE 5 = ±4.89 ACRES		UTILITY POLE
	PHASE 6 = ±4.17 ACRES		MAIL BOX
			CORRUGATED METAL PIPE
			HIGH DENSITY POLYETHYLENE PIPE
			WETLAND AREA
			PROPOSED FEATURES
			SOLAR PANEL
			UTILITY POLE
			PERIMETER FENCE
			PROPOSED TREE LINE
			UNDERGROUND ELECTRIC LINE
			DELIMITED WETLAND
			PERVIOUS GRAVEL ROAD
			COMPOST FILTER SOCK
			PROPOSED TREE
			TEMPORARY STAGING AREA
			TOPSOIL STOCKPILE AREA
			CONCRETE EQUIPMENT PAD

1 SITE PLAN
SCALE: 1" = 100'
CROSS REFERENCE: NONE

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					DRAFTED: BFJ
					CHECKED: MLS
					PROJ. NO : 22.2303
					SCALE : 1" = 100'
					DATE : MARCH 23, 2023

CONSTRUCTION SEQUENCING PLAN

LANSING COMMUNITY SOLAR PROJECT, LLC.
GENIE SOLAR ENERGY

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 518.786.7400
GLENS FALLS, NY • POUGHKEEPSIE, NY
JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY
www.ctmale.com

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SHEET 01 OF 01
DWG. NO: 22-0642

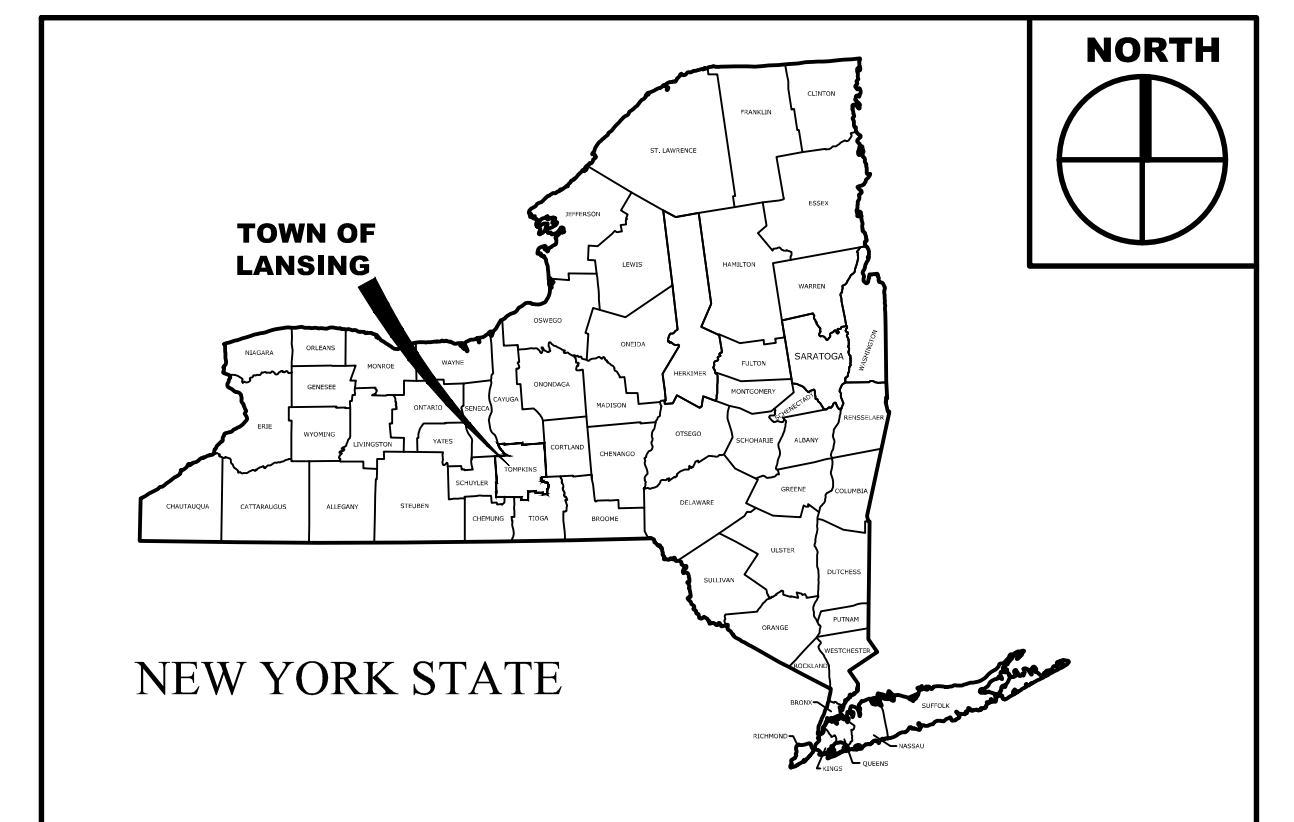
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APPENDIX G
Erosion and Sediment Control Plan and Details

LANSING COMMUNITY SOLAR, LLC GENIE SOLAR ENERGY

LANSINGVILLE ROAD

MARCH 24, 2023



SITE LOCATION MAP

PROJECT SUMMARY

NAME PLATE RATING	6.252 MW DC / 5.0 MW AC
UTILITY TERRITORY	NYSEG
UTILITY ZONE	C
SUBSTATION	N. LANSING
CIRCUIT	4303101
DC/AC RATIO	1.25
ANNUAL PRODUCTION	8,420,030 MWh
PV MODULES	14,050 PRISM SOLAR PST-445W-M72H
INVERTERS	40 CHINT CPS SCH125KTL-DO/US-600
STRINGS PER INVERTER	25
MODULES PER STRING	14-15

DRAWING LIST

Sheet Description	Sheet Title	Sheet Number
G-001	COVER SHEET	01
C-101	EXISTING CONDITIONS NORTH	02
C-102	EXISTING CONDITIONS SOUTH	03
C-103	OVERALL SITE AND ESC PLAN	04
C-104	LANDSCAPING PLAN	05
C-105	SOLAR ARRAY & ESC PLAN	06
C-106	ENTRANCE AND UTILITY POLE PLAN	07
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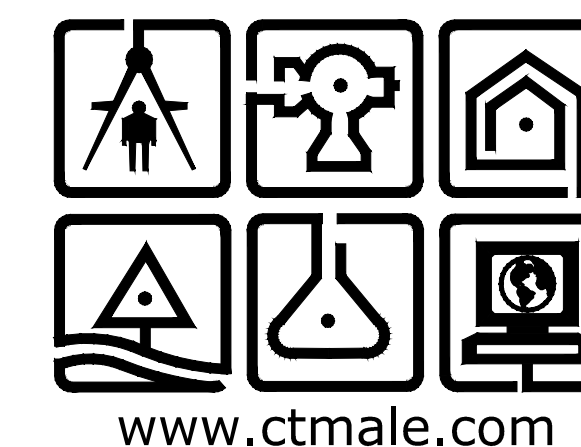
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WARNING: IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT IS ALTERED, THE ALTERING ARCHITECT SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. ARCHITECTURE - COMMISSIONER'S REGULATIONS PART 69.5.

WARNING: IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION. PROFESSIONAL ENGINEERING AND LAND SURVEYING - ART. 145, SECTION 7209

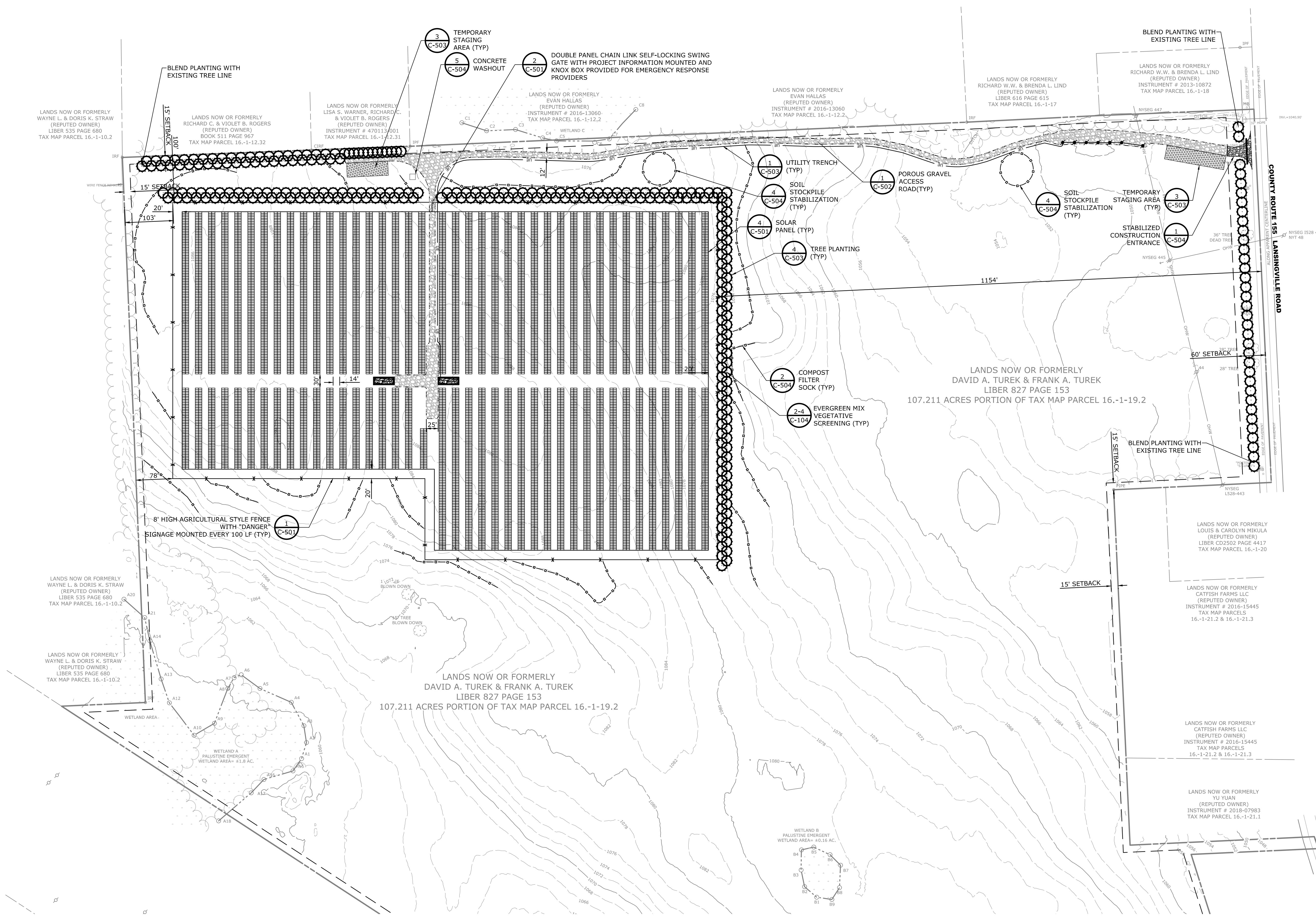
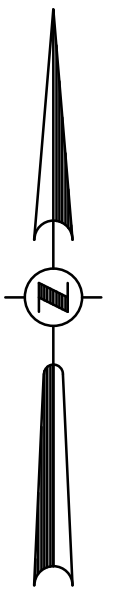
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PROJECT NO. 22.2303
DRAWING NO. 23-0157

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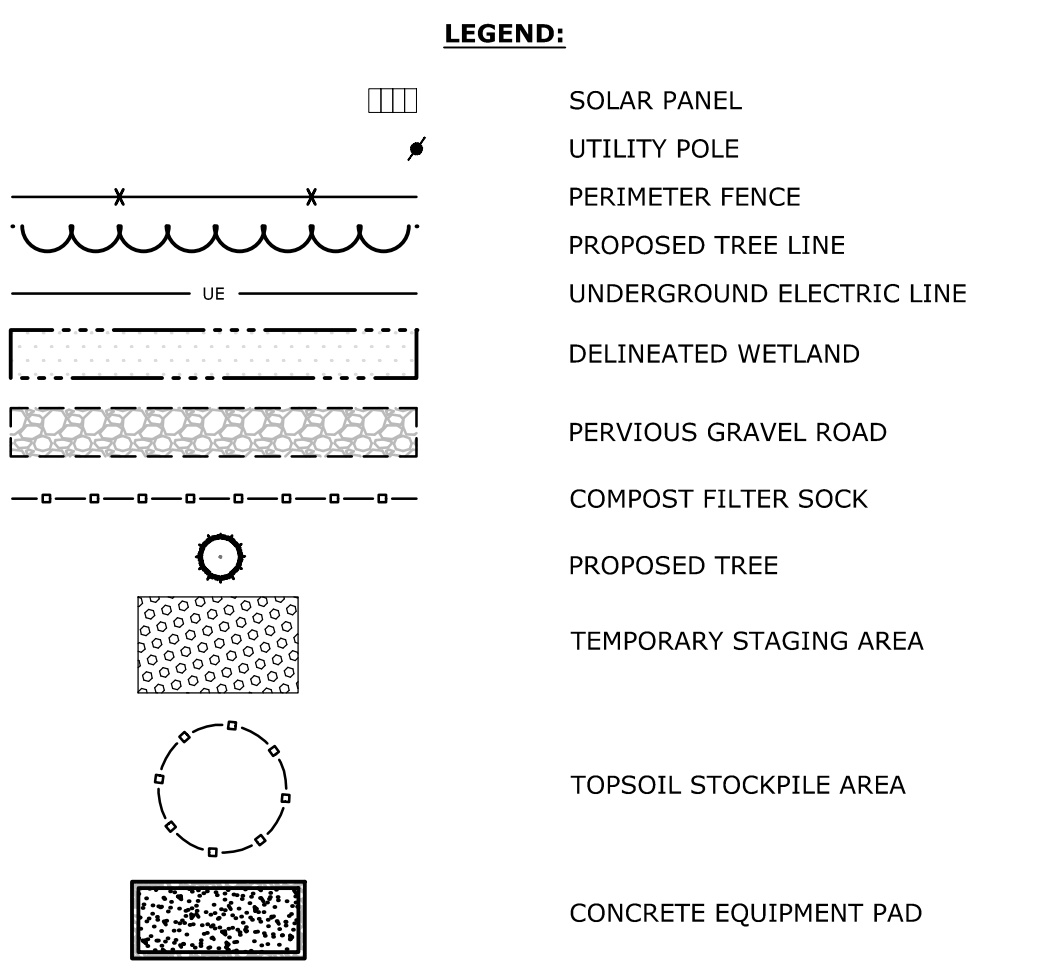


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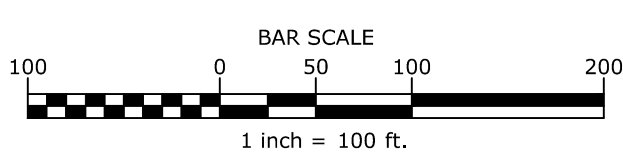
ZONING DISTRICT: (RA) RESIDENTIAL AGRICULTURE
 TAX MAP I.D.: 16-1-19.2
 TOTAL PARCEL SIZE: 107.2± AC
 PROPOSED FENCE AREA: 18.0± AC (16.8% OF PARCEL)
 PROPOSED ARRAY ENVELOPE: 16.3± AC (15.2% OF PARCEL)
 PROPOSED LOT COVERAGE BY SOLAR PANELS: 7.7± AC (7.2% OF PARCEL)
 PROPOSED AREA OF DISTURBANCE: 22.67± AC
 NEW GRAVEL ACCESS ROAD: 2,575± LF, 40,771± SQ. FT.
 TOTAL TREE CLEARING: 0.0± AC

ZONING ANALYSIS:

METRIC	RA ZONING DISTRICT	PROPOSED
MAX PANEL HEIGHT	18 FT.	18 MAX. FT.
MIN. FRONT YARD SETBACK	60 FT.	1,154± FT.
MIN. SIDE YARD SETBACK	15 FT.	100± FT.
MIN. REAR YARD SETBACK	15 FT.	78± FT.
MAX LOT COVERAGE	NONE	7.2± %



PRELIMINARY



DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

OVERALL SITE AND ESC PLAN

LANSING COMMUNITY SOLAR, LLC
GENIE SOLAR ENERGY

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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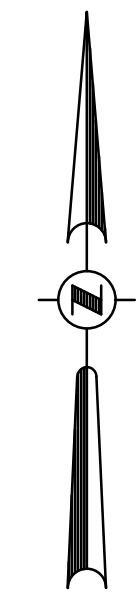
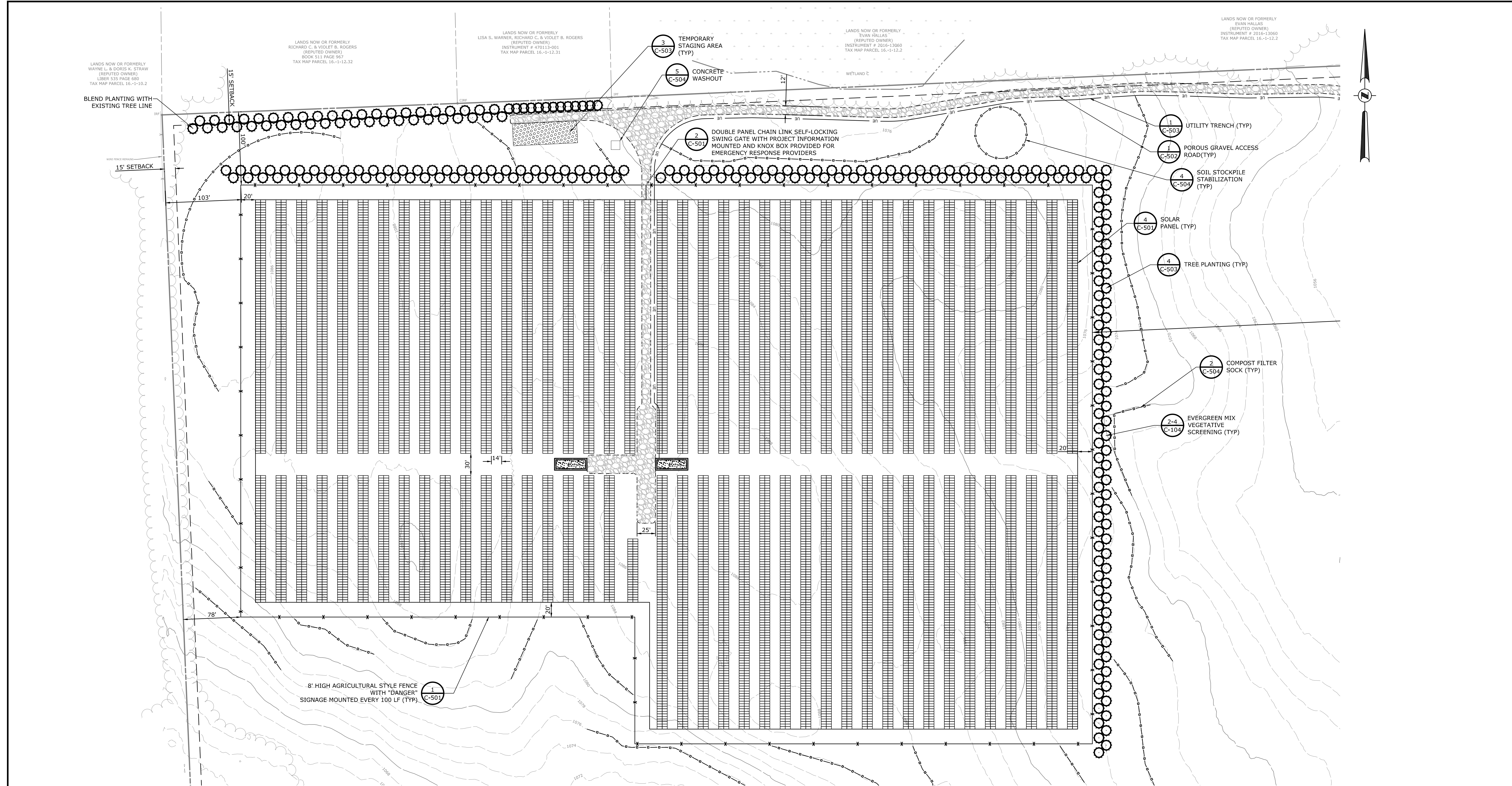
DESIGNER: MLS
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 PROJ. NO : 22.2303
 SCALE : AS NOTED
 DATE : MARCH 24, 2023

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 SHEET 04 OF 14
 DWG. NO: 23-0157

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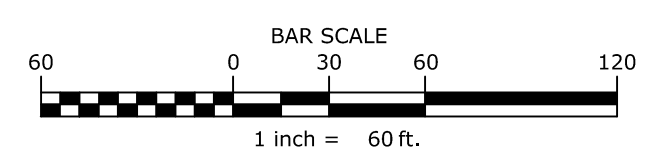
- SOLAR PANEL
- UTILITY POLE
- PERIMETER FENCE
- PROPOSED TREE LINE
- UNDERGROUND ELECTRIC LINE
- DELINEATED WETLAND
- PERVIOUS GRAVEL ROAD
- COMPOST FILTER SOCK
- PROPOSED TREE
- TEMPORARY STAGING AREA
- TOPSOIL STOCKPILE AREA
- CONCRETE EQUIPMENT PAD

SITE PLAN NOTES:

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 TAX MAP I.D.: 16.-1-19.2
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PRELIMINARY

SOLAR ARRAY & ESC PLAN

LANSING COMMUNITY SOLAR, LLC
GENIE SOLAR ENERGY

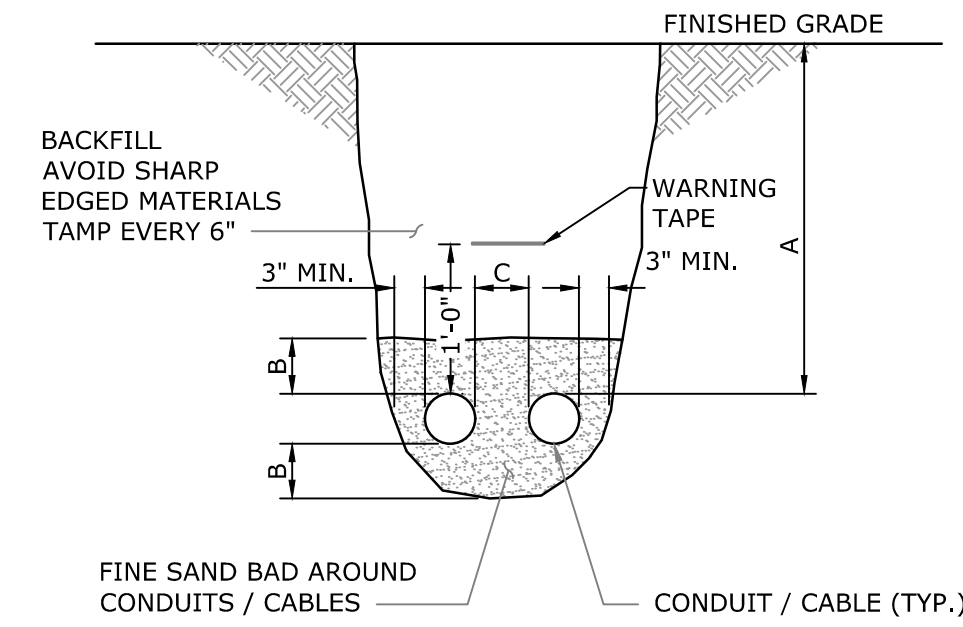
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MINIMUM DIMENSIONS			
SERVICE TYPE	A	B	C
≤ 1,000 VOLTS	18"	3"	6"
> 1,000 VOLTS	30"	6"	6"
≤ 1,000 VOLTS DIRECT BURIAL	36"	6"	6"

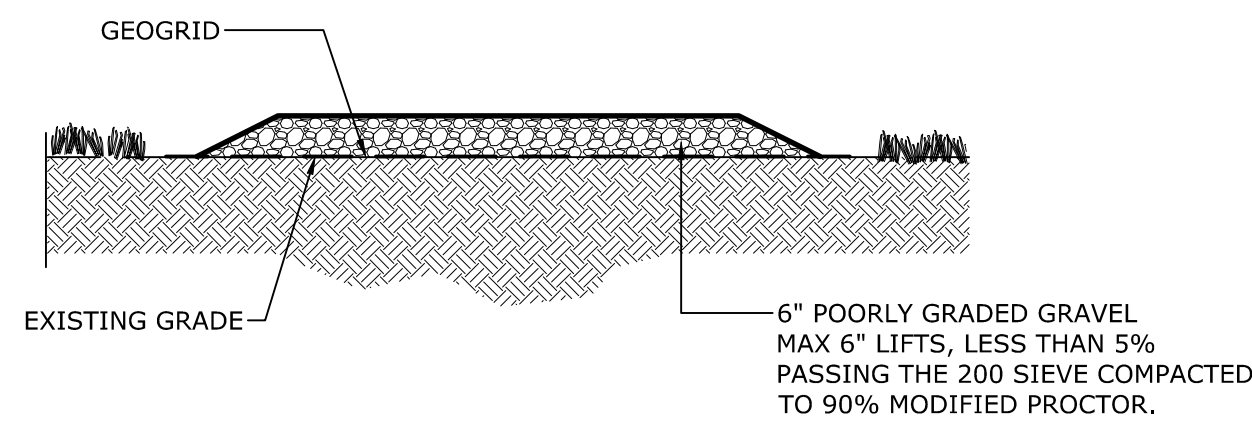
NOTES:

- ALL UNDERGROUND CONDUIT SHALL BE PVC. CONDUIT SHALL TRANSITION TO RGS FOR ELBOW AND STUB-UPS AND STAY AS RGS UP INTO CABINET OR ENCLOSURE.
- UNDER ROADS AND PARKING AREAS CONDUIT SHALL BE SCHEDULE 80 PVC, UNDER GRASSY AREAS CONDUIT SHALL BE SCHEDULE 40 PVC.
- CALL BEFORE YOU DIG, DIAL 811 TO BE CONNECTED TO THE LOCAL ON-CALL CENTER. YOU MUST CALL AT LEAST 48 HOURS BEFORE EXCAVATING.
- REFER TO ELECTRICAL DESIGN PLANS FOR DETAILS OF THIS INSTALLATION.
- MAINTAIN 3' SEPARATION DISTANCE FROM OTHER UTILITIES.

1 TYPICAL CONDUIT TRENCH SECTION
C-503 SCALE: NONE CROSS REFERENCE: NONE

UPLAND SEED MIX		
LOW-GROWING WILDFLOWER & GRASS MIX - ERNM#156 (OR APPROVED EQUAL)		
SEEDING RATE: 20 LB PER ACRE WITH A COVER CROP OF GRAIN RYE AT 30 LB PER ACRE		
	COMMON NAME	% OF MIX
	SHEEP FESCUE, VARIETY NOT STATED	63.60%
LOLIUM MULTIFLORUM (L. PERENNE VAR. ITALICUM)	ANNUAL RYEGRASS	17%
	PERENNIAL BLUE FLAX	8%
	BLACKEYED SUSAN, COASTAL PLAIN NC ECOTYPE	2%
	LANCELEAF COREOPSIS, COASTAL PLAIN NC ECOTYPE	2%
	OXEYE DAISY	2%
	SHASTA DAISY	1%
	PARTRIDGE PEA, PA ECOTYPE	1%
	CORN POPPY/SHIRLEY MIX	1%
	COMMON YARROW	0.5%
ASTER OBLONGIFOLIUS (SYMPHYOTRICHUM OBLONGIFOLIUM)	AROMATIC ASTER, PA ECOTYPE	0.5%
	MISTFLOWER, VA ECOTYPE	0.5%
MONARDA PUNCTATA, COASTAL PLAIN SC ECOTYPE	SPOTTED BEEBALM, COASTAL PLAIN SC ECOTYPE	0.5%
	BUTTERFLY MILKWEED	0.3%
	SLENDER MOUNTAINMINT	0.1%
COMPANY INFORMATION		
ERNST CONSERVATION SEEDS, INC.		
ADDRESS: 8884 MERCER PIKE, MEADVILLE, PA 16335		
PHONE: (800) 873-3321		
WEB: HTTP://WWW.ERNSTSEED.COM		

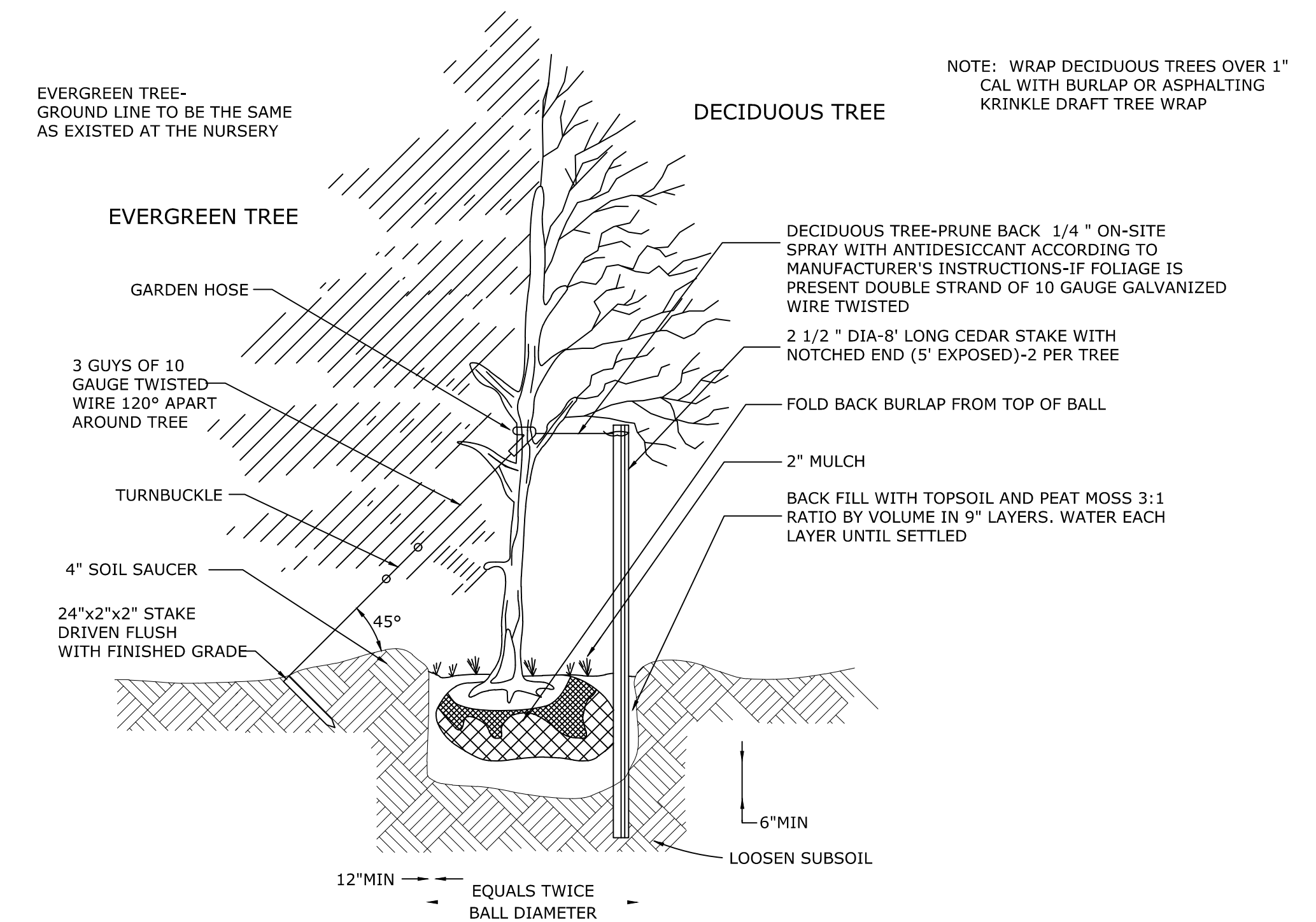
2 SEED MIXTURES DETAIL
C-503 SCALE: NTS CROSS REFERENCE: NONE



NOTES:

- PLACED ON EXISTING UNDISTURBED GRADE. SOIL DISTURBANCE SHALL BE LIMITED TO THE AREAS INDICATED ON THE SITE PLAN.
- GRASS AND VEGETATION SHALL BE MOWED TO MAXIMUM HEIGHT OF 1" PRIOR TO PLACING GEOGRID.
- UPON COMPLETION OF CONSTRUCTION ACTIVITY APPLY 3" THICKNESS OF TOPSOIL ON POORLY GRADED GRAVEL WHERE SHOWN AND APPLY GRASS SEED

3 TEMPORARY STAGING AREA
C-503 SCALE: NONE CROSS REFERENCE: NONE

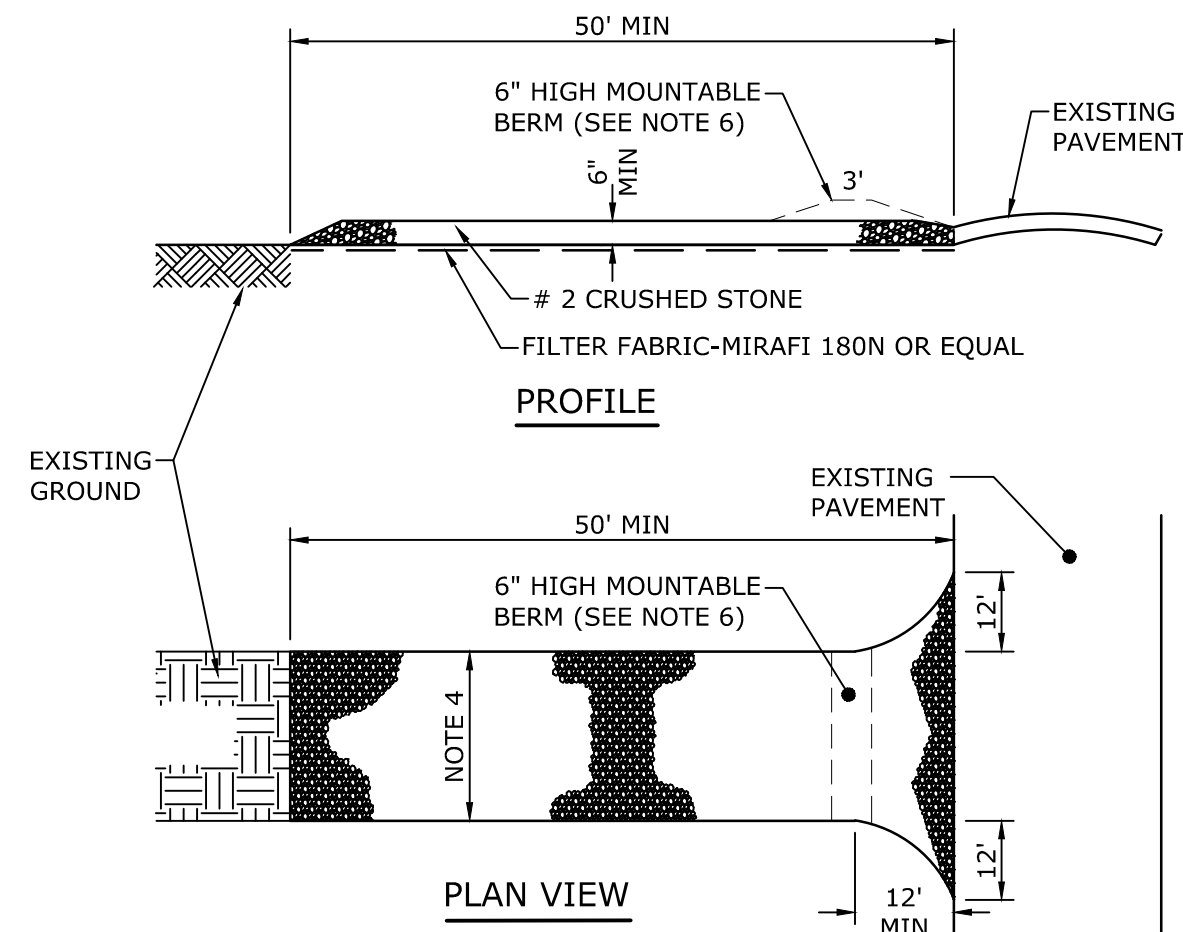


4 TYPICAL PLANTING DETAIL
C-503 SCALE: NONE CROSS REFERENCE: NONE

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						C.T. MALE ASSOCIATES Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. 50 CENTURY HILL DRIVE, LATHAM, NY 518.786.7400 COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY www.ctmale.com	C-503 SHEET 10 OF 14 DWG. NO: 23-0157



- NOTES:**
- USE NYS DOT #2 STONE, RECLAIMED, OR RECYCLED CONCRETE OR APPROVED EQUAL.
 - THE LENGTH SHALL NOT BE LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
 - CRUSHED STONE SHALL BE MAINTAINED AT A MINIMUM OF 6" IN DEPTH.
 - ENTRANCE SHALL HAVE A 12 FOOT MINIMUM WIDTH, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. ENTRANCE SHALL BE AT LEAST 24 FEET WIDE IF SINGLE ENTRANCE TO SITE.
 - GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACING OF STONE.
 - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS NOT PRACTICAL, A MOUNTABLE BERM WITH 1:5 SLOPES WILL BE PERMITTED.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

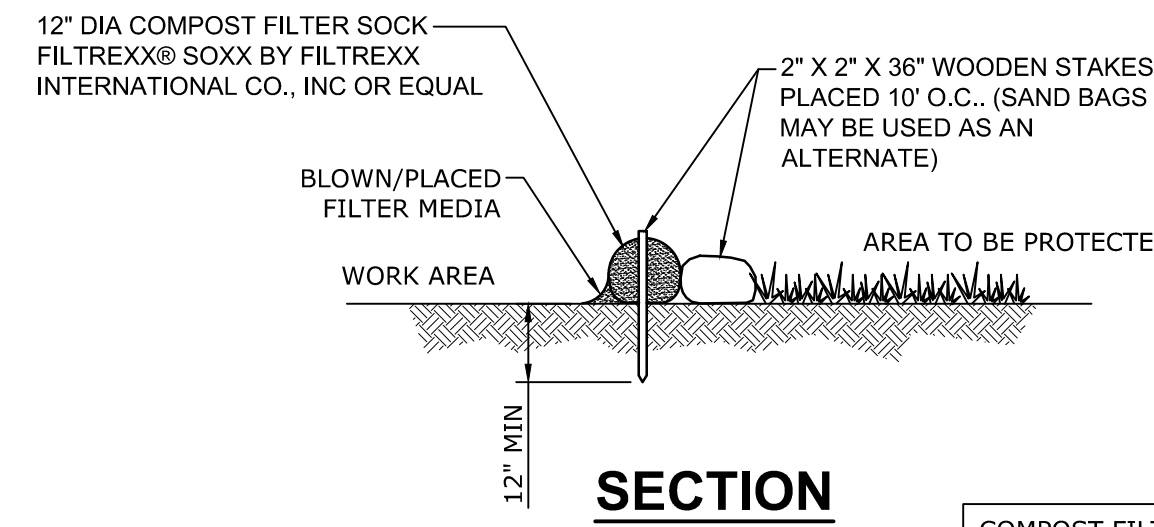
1
C-504
STABILIZED CONSTRUCTION ENTRANCE DETAIL
SCALE: NONE
CROSS REFERENCE: NONE

SEEDING AND MULCHING NOTES:

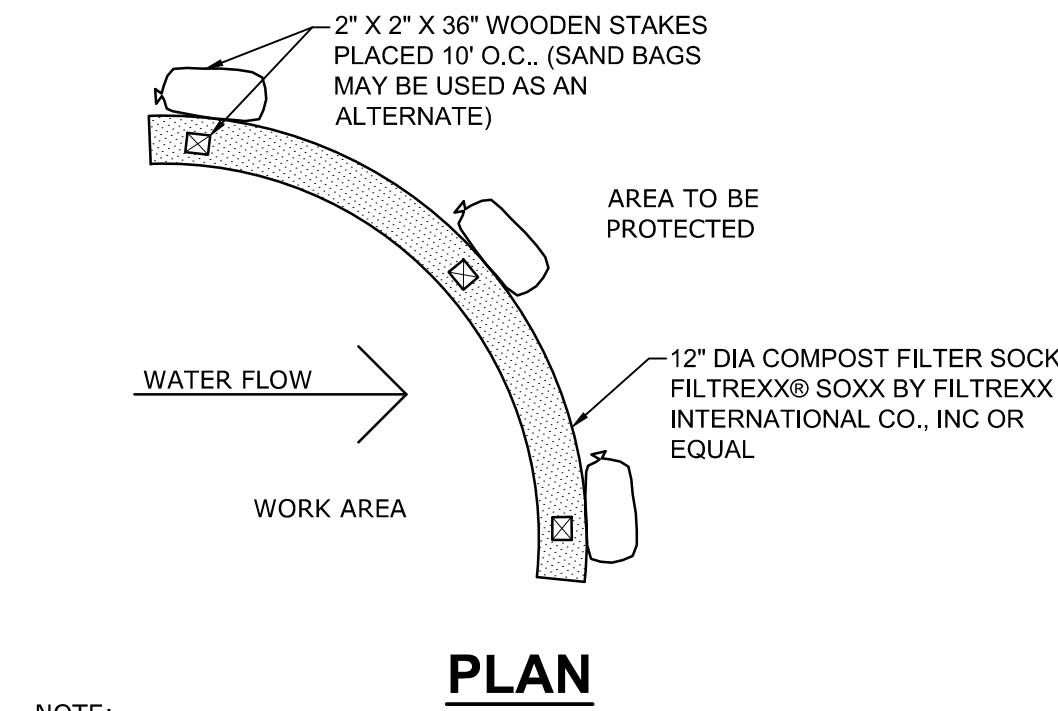
- TEMPORARY STABILIZATION MEASURES SHALL START AS SOON AS PRACTICAL ON PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NOT MORE THAN (7) DAYS AFTER WORK HAS CEASED. ACCEPTABLE TEMPORARY STABILIZATION MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO SEEDING, MULCH, STRAW, EROSION CONTROL BLANKETS, SOIL STABILIZING EMULSION PRODUCTS, OR SOME FUNCTIONALLY EQUIVALENT MEASURE. TEMPORARY SEEDING SHALL BE ANNUAL RYE GRASS, APPLIED AT A RATE OF 30 LBS./ACRE.
- TEMPORARY EROSION CONTROL PROTECTION BY MULCHING SHALL BE CARRIED OUT WITHIN (7) DAYS OF THE FINAL GRADE BEING FINALIZED TO AVOID POSSIBLE CONTAMINATION OF PONDS, STREAMS, OR OTHER WATERCOURSES. PLACEMENT OF JUTE MESH OR EROSION CONTROL BLANKETS OVER THE MULCH IS RECOMMENDED TO PROVIDE POSITIVE "TACKING" OF THE MULCH AND INCREASED PROTECTION AGAINST EROSION.
- PERMANENT SEEDING AND MULCH SHALL BE APPLIED AS SOON AS THE DISTURBED AREAS HAVE ACHIEVED FINAL GRADE. IF THE SPECIFIED SEEDING DATES ARE MISSED, MULCH SHALL BE APPLIED TO THE SLOPE AND SEED SHALL BE APPLIED TO THE TOP OF THE MULCH IN THE NEXT SEEDING SEASON AFTER RECONDITIONING THE TOPSOIL. WHEN THE FINAL GRADE CANNOT BE OBTAINED IN (7) DAYS, MULCH SHALL BE APPLIED FOR PURPOSES OF TEMPORARY EROSION CONTROL.
- EROSION CONTROL BLANKETS OR SOIL STABILIZING EMULSION PRODUCTS SERVE AS A TEMPORARY EROSION CONTROL MEASURE ON ALL SLOPES STEEPER THAN OR EQUAL 1V:3H AND AS INDICATED ON THE PLANS.
- THE UNDERLYING SOIL IN AREAS THAT WILL BE PERMANENTLY PERVIOUS (LAWN, GRASS AND LANDSCAPED AREAS) SHALL BE RESTORED IN ACCORDANCE WITH THE MEASURES IDENTIFIED IN THE JANUARY 2015, NYSDEC STORM WATER MANAGEMENT DESIGN MANUAL, SECTION 5.1.6 "SOIL RESTORATION".
- SEEDBED SHALL BE PREPARED BY LOOSENING THE TOPSOIL TO A DEPTH OF 4 TO 6 INCHES, AND LIMING TO A PH OF 6.5. FERTILIZER SHALL BE APPLIED IF NECESSARY.
- MULCH OVER PREEMINENT SEED AREAS SHALL CONSIST OF SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE AND ANCHORED WITH WOOD FIBER HYDROMULCH APPLIED AT A RATE OF 500 TO 750 POUNDS PER ACRE. THE WOOD FIBER MULCH SHALL BE APPLIED THROUGH A HYDROSEEDER IMMEDIATELY AFTER SEEDING
- SEED MIXTURE:
 - LOW GROWING WILDFLOWER AND GRASS MIX - ERNMX#156 OR APPROVED EQUAL.
 - AS PER SEED MIX DETAIL,

TEMPORARY SEEDING AND MULCHING NOTES:

- TEMPORARY STABILIZATION MEASURES SHALL START AS SOON AS PRACTICAL ON PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NOT MORE THAN (7) DAYS AFTER WORK HAS CEASED. ACCEPTABLE TEMPORARY STABILIZATION MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO SEEDING MULCH, STRAW, EROSION CONTROL BLANKETS, SOIL STABILIZING EMULSION PRODUCTS, OR SOME FUNCTIONALLY EQUIVALENT MEASURE. TEMPORARY SEEDING SHALL BE ANNUAL RYE GRASS, APPLIED AT A RATE OF 30 LBS./ACRE.
- AREAS TO RECEIVE TEMPORARY SEEDING AND MULCHING SHALL RECEIVE BOTH GRASS SEED AND MULCH, AS DESCRIBED BELOW.
- SEED MIX TO BE LOW GROWING WILDFLOWER AND GRASS MIX - ERNMX#156 OR APPROVED EQUAL.
- MULCH SHALL CONSIST OF STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR WOOD CHIPS (MIN. 3" DEEP). (A WOOD FIBER HYDROMULCH OR OTHER APPROVED SPRAYABLE PRODUCT MAY BE SUBSTITUTED, IF APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.)
- A JUTE MESH SHALL BE PLACED OVER THE MULCH IN AREAS WHERE WIND OR WATER EROSION PREVENTS ESTABLISHMENT OF GRASS COVER.

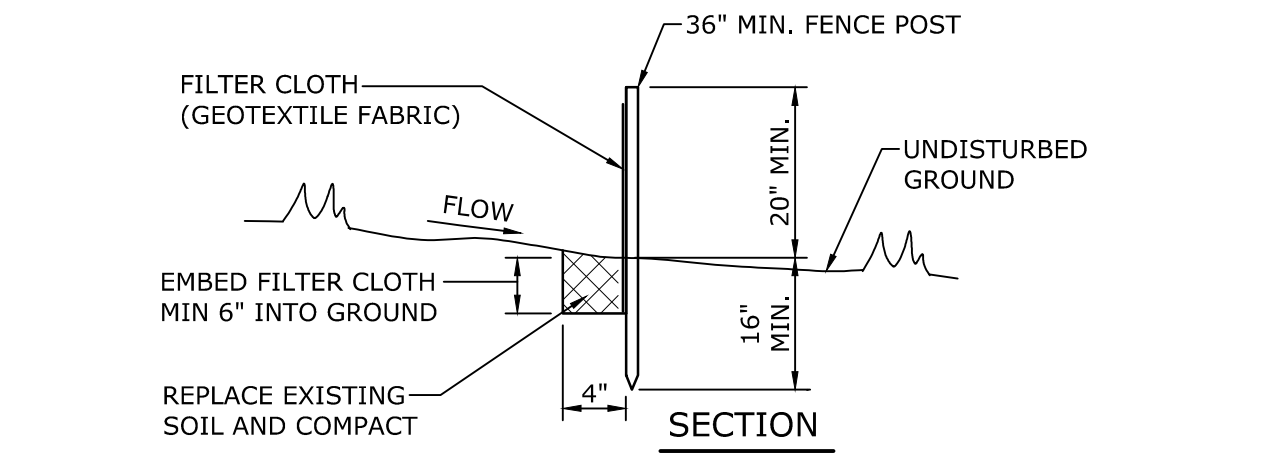
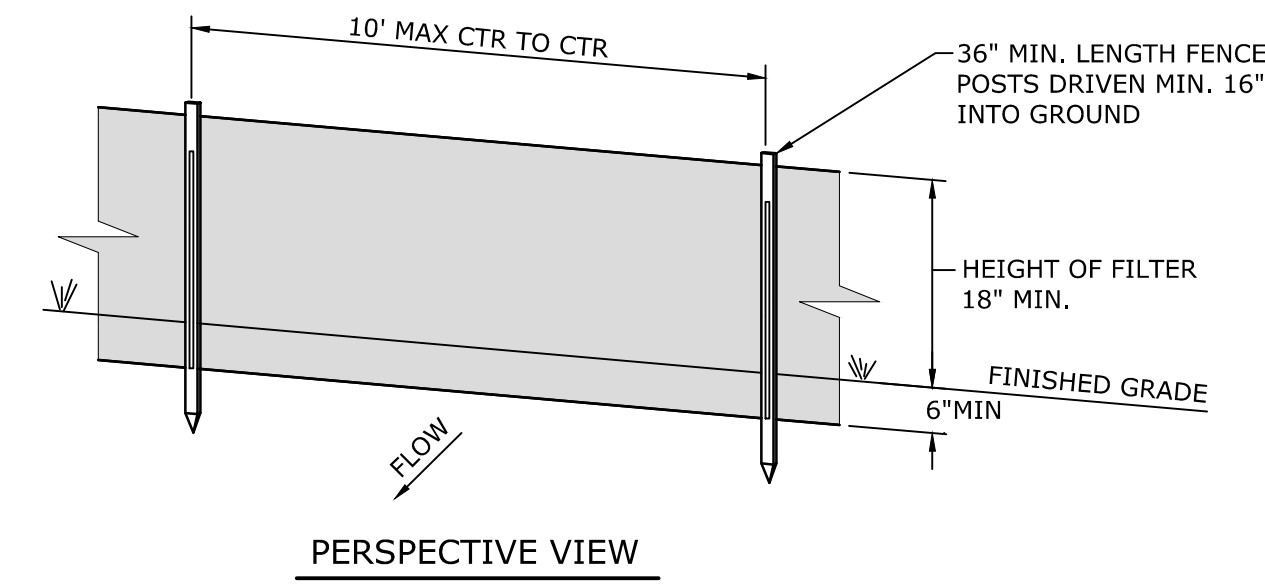


COMPOST FILTER SOCK MAY BE USED IN AREAS OF ROCK WHERE INSTALLATION OF SILT FENCE IS IMPRACTICAL



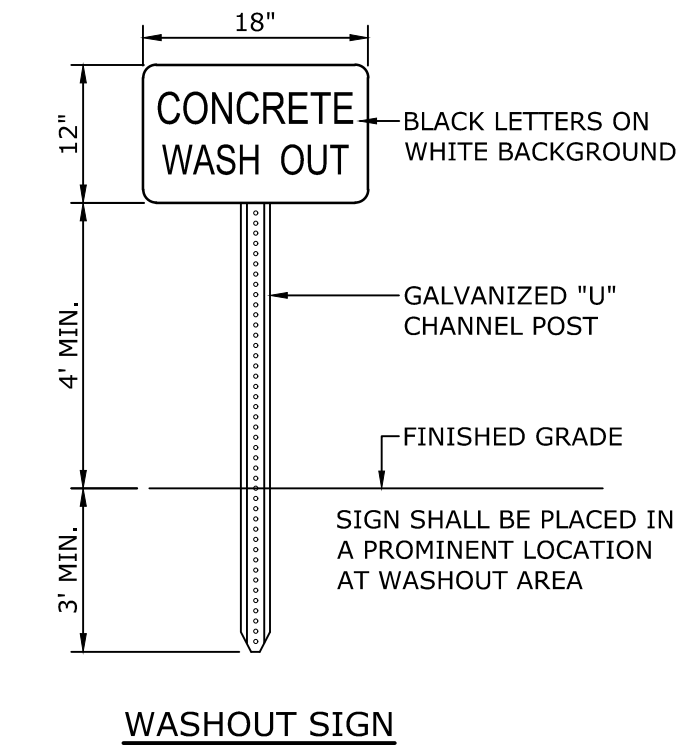
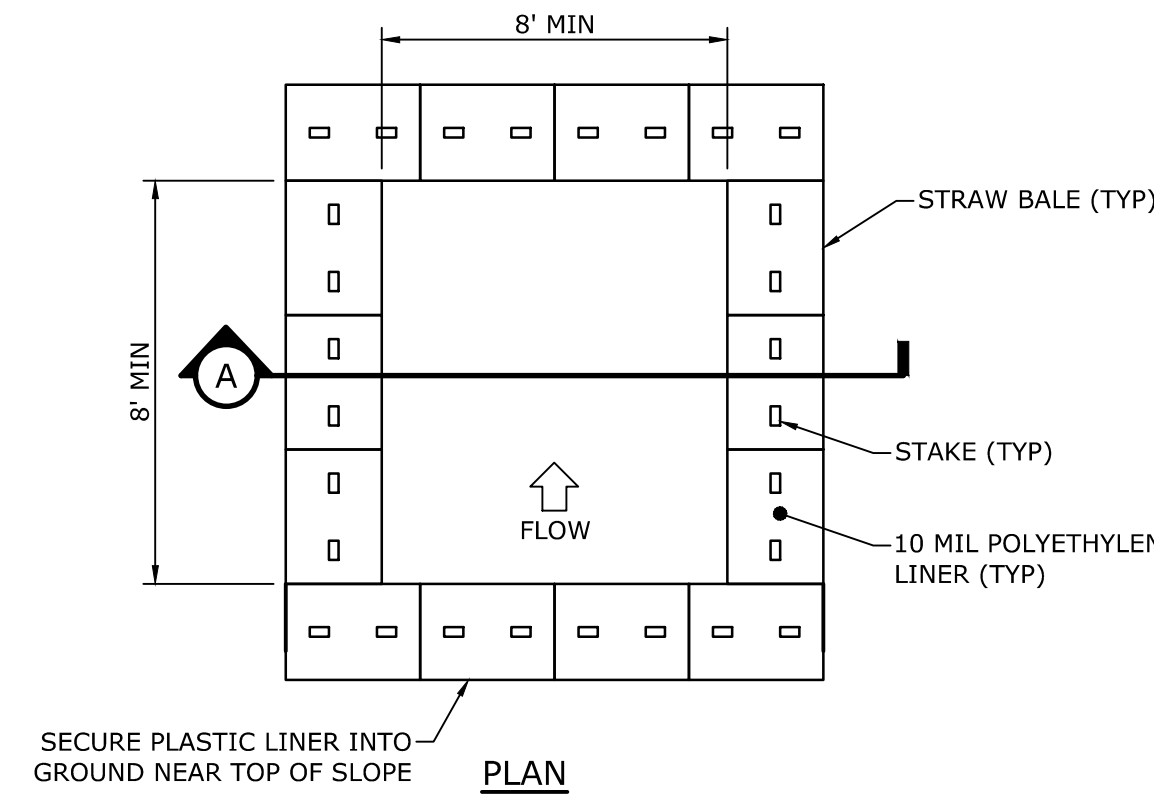
- NOTE:**
- FILL COMPOST FILTER SOCK WITH FILTER MEDIA APPROVED BY NYSDEC FOR THIS APPLICATION.
 - WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE A LOW NUTRIENT VALUE

2
C-504
COMPOST FILTER SOCK
SCALE: NTS
CROSS REFERENCE: NONE



- NOTES:**
- POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
 - FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
 - FILTER CLOTH SHALL BE MIRAFI 100X OR APPROVED EQUAL.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. WHEN THE ACCUMULATED SEDIMENT REACHES 30% OF THE SILT FENCE HEIGHT, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROPRIATE UPLAND AREA.
 - PREFABRICATED UNITS SHALL BE MIRAFI SILT FENCE, MIRAFI ENVIROFENCE OR APPROVED EQUIVALENT.

3
C-504
STANDARD SILT FENCE
SCALE: NONE
CROSS REFERENCE: NONE



- NOTES**
- CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
 - CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
 - WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
 - WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
 - ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
 - AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.
 - SIGN SHALL BE PLACED IN A PROMINENT LOCATION AT WASHOUT AREA

5
C-504
CONCRETE WASHOUT DETAIL
SCALE: NONE
CROSS REFERENCE: NONE

SILT FENCE/COMPOST FILTER SOCK (CFS) NOTES:

- SILT FENCE OR CFS SHALL BE PLACED ON THE DOWNSLOPE SIDE OF DISTURBED AREAS AND AROUND THE PERIMETER OF SOIL STOCKPILES.
- COMPOST FILTER SOCK SHALL BE PLACED AROUND THE BOUNDARY OF WETLANDS ADJACENT TO THE WORK AREA, AND AT THE EDGE OF WETLANDS AFTER CONSTRUCTION IS COMPLETED.
- SILT FENCE SHALL BE REPAIRED OR REPLACED WHEN THE ENDS ARE FRAYED OR WORN, AND WHEN THE FENCE IS NOT ANCHORED 6" INTO THE GROUND. WHEN THE ACCUMULATED SEDIMENT REACHES 30% OF THE SILT FENCE HEIGHT, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROPRIATE UPLAND AREA.
- COMPOST FILTER SOCK SHALL BE REPLACED WHEN TORN/HOLES HAVE FORMED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE SOCK. COMPOST FILTER SOCK SHALL BE FILLED WITH APPROPRIATE MATERIAL (NO WOODCHIPS), PER THE NYSDEC "BLUEBOOK".

DUST CONTROL NOTES:

- DUST SHALL BE CONTROLLED ON THIS PROJECT BY USE OF A WATER TRUCK.
- THE QUALIFIED INSPECTOR WILL DETERMINE THE FREQUENCY OF WATER APPLICATION IN ORDER TO CONTROL DUST.
- CHEMICALS OR OTHER METHODS OF DUST CONTROL ARE PROHIBITED TO BE USED ON THIS PROJECT, UNLESS APPROVED BY THE NYSDEC REGIONAL OFFICE.

STABILIZED CONSTRUCTION ACCESS NOTES:

- STABILIZED CONSTRUCTION ACCESS SHALL BE INSTALLED WHERE NECESSARY TO PREVENT SEDIMENT FROM BEING TRACKED ONTO ROADWAYS.
- PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED. CONSTRUCTION TRAFFIC SHALL NOT CROSS STREAMS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES, AND SHALL NOT OPERATE UNNECESSARILY WITHIN WATERWAYS OR DRAINAGE DITCHES.
- IF INTERNAL CONSTRUCTION ROADS ARE DETERMINED TO BE A SOURCE OF SEDIMENT-LADEN RUNOFF TO SENSITIVE AREAS, THEY SHALL BE STABILIZED AS SOON AS PRACTICABLE.

PRELIMINARY

EROSION AND SEDIMENT CONTROL DETAILS

**LANSING COMMUNITY SOLAR, LLC
GENIE SOLAR ENERGY**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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