



# PLANNING BOARD MEETING

Lansing Town Hall Board Room  
Monday, May 22, 2023  
6:30 PM

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## AGENDA

SUBJECT TO CHANGE

Meeting is open to the public and streamed live on YouTube.

### VIEW THE MEETING LIVE - TOWN OF LANSING YOUTUBE CHANNEL

To find our YouTube Channel - Go to [www.lansingtown.com](http://www.lansingtown.com), click on the "YouTube" Icon (red square) located on the bottom left corner of our Home Page.

#### 1. Call Meeting to Order

#### 2. Roll Call

#### 3. Action Items

a. Applicant: Barry & Cathy Putnam, owners

Location: 1547 Ridge Rd, Tax Parcel Number 12.-1-17.4

Project Description: The applicant proposes to subdivide an ~12.26 acre lot into two parcels. Parcel A is 6.46 acres and Parcel B is a 5.78 acre flag lot. The property is in the RA Zone.

SEQR: This is an Unlisted action under SEQR 617.4 environmental review.

Anticipated Action: Declaration of Lead Agency; Set public hearing

b. Applicant: James Toll, owner

Location: 365 Fenner Rd, Tax Parcel Number 9.-1-1,2

Project Description: The applicant proposes to subdivide a ~6.7 acre flag lot from the 79.58 parent lot. The property is in the RA Zone.

SEQR: This is an Unlisted action under SEQR 617.4 environmental review.

Anticipated Action: Declaration of Lead Agency; Set public hearing

c. Applicant: Rocco Lucent, Village Solars LLC

Location: 88 & 96 Village Circle, Tax Parcel Numbers 39.-1-38.8 & 38.-1-38.16

Project Description: The applicant proposes to reconfigure lots 88 and 96 into three lots. Lot 1 is .72 acres; Lot 2 is .74 acres; Lot 3 is .92 acres. The property is in Village Circle – Village Solar PDA #1

SEQR: This is a Type I action under SEQR 617.4 environmental review.

Anticipated Action: Declaration of Lead Agency; Set public hearing

- d. Applicant: Genie Solar Energy, sponsor

Location: Lansingville Road, Tax Parcel Number 16.-1-19.2

Project Description: The applicant proposes to construct a 5 MW ground-mounted solar, approximately 18 acres in size, on a 107.2 acre parcel in the RA zone. The project will be subject to Town of Lansing code §270-27 site plan review, and §270-35 R. Solar Energy Facility Special Conditions

SEQR: Type I Action

Anticipated Action: Public Hearing

- e. Applicant: Kevin Kirby, owner

Location: 89 Goodman Rd, Tax Parcel Number 20.-1-8.22

Project Description: The applicant proposes to operate a kennel from their single family home, located in the RA Zone.

SEQR: This is an Unlisted action under SEQR 617.4 environmental review.

Anticipated Action: SEQR Determination of Significance; Site Plan Review

#### **4. Adjourn Meeting**

In accordance with the Americans with Disabilities Act, persons who need accommodation to attend or participate in this meeting should contact the Town Clerk's Office at 607-533-4142. Request should be made 72 hours prior to the meeting.





**NOTES**

- 1.) SUBJECT TO ALL UTILITY R.O.W.'S & HIGHWAY RIGHTS OF RECORD.
- 2.) SUBJECT TO ANY STATE OF FACTS AN UP TO DATE ABSTRACT OF TITLE MAY SHOW.
- 3.) ALL INDIVIDUAL PROPERTY OWNERS WILL COMPLY WITH THE STORM WATER REGULATIONS ON THEIR OWN PARCEL.

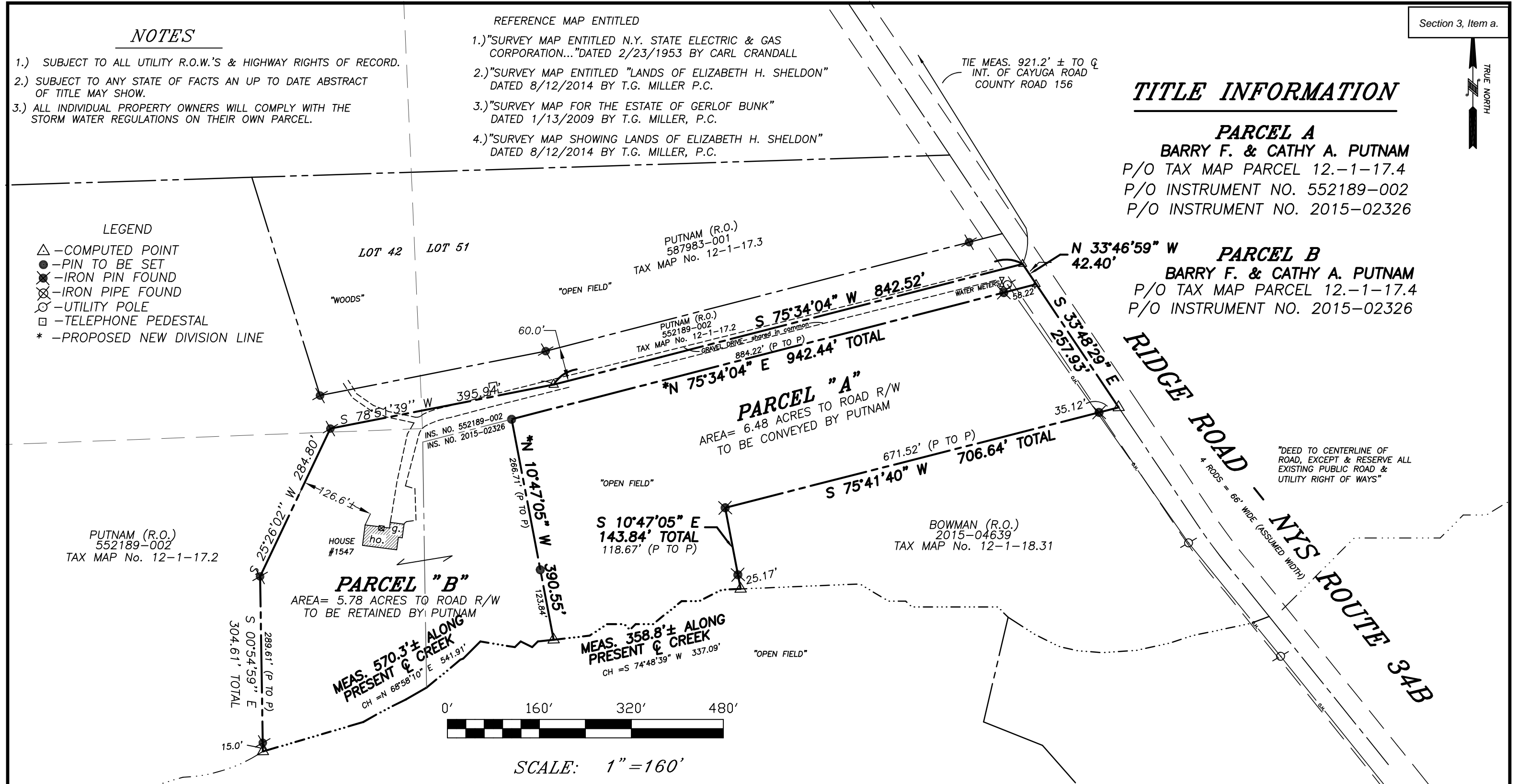
- REFERENCE MAP ENTITLED
- 1.) "SURVEY MAP ENTITLED N.Y. STATE ELECTRIC & GAS CORPORATION..." DATED 2/23/1953 BY CARL CRANDALL
  - 2.) "SURVEY MAP ENTITLED "LANDS OF ELIZABETH H. SHELDON" DATED 8/12/2014 BY T.G. MILLER P.C.
  - 3.) "SURVEY MAP FOR THE ESTATE OF GERLOF BUNK" DATED 1/13/2009 BY T.G. MILLER, P.C.
  - 4.) "SURVEY MAP SHOWING LANDS OF ELIZABETH H. SHELDON" DATED 8/12/2014 BY T.G. MILLER, P.C.

**TITLE INFORMATION**

**PARCEL A**  
 BARRY F. & CATHY A. PUTNAM  
 P/O TAX MAP PARCEL 12.-1-17.4  
 P/O INSTRUMENT NO. 552189-002  
 P/O INSTRUMENT NO. 2015-02326

**PARCEL B**  
 BARRY F. & CATHY A. PUTNAM  
 P/O TAX MAP PARCEL 12.-1-17.4  
 P/O INSTRUMENT NO. 2015-02326

- LEGEND**
- △ - COMPUTED POINT
  - - PIN TO BE SET
  - ⊗ - IRON PIN FOUND
  - ⊗ - IRON PIPE FOUND
  - - UTILITY POLE
  - - TELEPHONE PEDESTAL
  - \* - PROPOSED NEW DIVISION LINE



**CERTIFICATION**  
 BARRY F. PUTNAM  
 I hereby certify to CATHY A. PUTNAM  
 that I am a licensed land surveyor, New York State License No. 050096, and that this map correctly delineates an actual survey on the ground made by me or under my direct supervision; and that I found no visible encroachments either way across property lines except as shown hereon.  
 SIGNED: Lee Dresser DATED: 4/13/2023

**WARNING**  
 ALTERATION OF THIS MAP NOT CONFORMING TO SECTION 7209, SUBDIVISION 2, NEW YORK STATE EDUCATION LAW, ARE PROHIBITED BY LAW. ALL CERTIFICATIONS HEREOF ARE VALID FOR THIS MAP AND COPIES THEREOF ONLY IF SAID MAP OR COPIES BEAR THE IMPRESSION SEAL OF THE LICENSED LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.

**T G M**  
**T. G. MILLER P.C.**  
 ENGINEERS AND SURVEYORS  
 605 WEST STATE STREET  
 ITHACA, NEW YORK 14850  
 TEL (607) 272-6477

**TITLE: FINAL SUBDIVISION PLAT**  
 SHOWING PROPOSED DIVISION OF LANDS OWNED BY  
**BARRY F. & CATHY A. PUTNAM**  
 LOCATED ON RIDGE ROAD  
 TOWN OF LANSING, TOMPKINS COUNTY, NEW YORK

DATE: 4/13/2023  
 SCALE: 1"=160'

REVISED

STATE OF NEW YORK  
 LEE DRESSER  
 LICENSED LAND SURVEYOR  
 050096

Town Of Lansing Planning Board  
Application for Review and Approval of Subdivision

RECEIVED

APR 17 2023

Check One:        Subdivision Plat      Fee Paid \$             Date         
       Boundary Change      Receipt No.       

1. Name or Identifying Title BARRY + CATHY PUTNAM

2. Tax Parcel No. 12-1-17.4      Zoning District       

3. Subdivider: (if owner, so state:  
if agent or other type of relationship, state details on separate sheet)

Name & Title BARRY E. PUTNAM      OWNER  
Signature [Signature]      Date 4-12-2023  
Address 1547 BRIDGE RD      LANRING, NY 14882  
Phone 607-73-3746 Fax             E-Mail bputnam1547@gmail.com  
Other Contact information       

4. Licensed Land Surveyor:  
Name: TG MILLER  
Address 203 N. Aurora St. - ITHACA, NY 14850  
Phone 607-272-6477 Fax             E-Mail         
Other Contact information       

5. Engineer:  
Name:         
Address         
Phone        Fax             E-Mail         
Other Contact information       

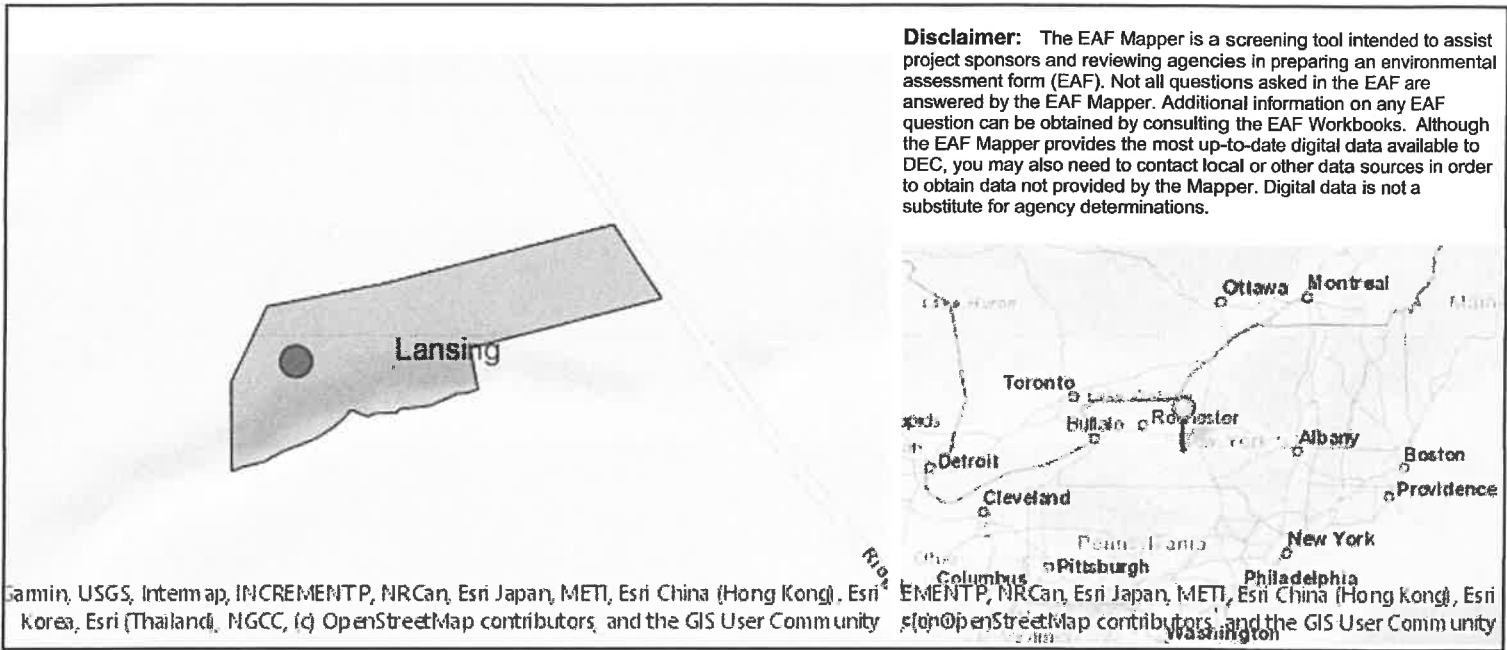
6. Easements or other restrictions on property: (Describe generally)  
      

7. Names of abutting owners and owners directly across adjoining streets, including those in other towns ( Available at Tompkins County Assessor's Office. Attach additional sheets if necessary)

Don + SHARON BOWMAN      12-1-18.31  
Abigail Gibson      12-7-18.40  
Rachel Abruzzo + DERYCK DOWNEY      10-1-6.1  
TRACY + MARION TOBEY      10-1-6.2  
        
KEVIN AND ANDRA PUTNAM      12-1-17.3  
~~IDE AND LAURA HUNTER~~

8. Requested exceptions: The Planning Board is hereby requested to authorize the following exceptions to or waivers of its regulations governing Subdivisions (attach list of exceptions with the reason for each exception set forth):  
        
        
      

\* Note: Application, Fee and required documents must be received in the Planning Office 21 days prior to the scheduled Planning Board Meeting.



Map data © OpenStreetMap contributors, and the GIS User Community; Imagery © Mapbox, USGS, Intermap, INCREMENTP, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No

## Short Environmental Assessment Form

### Part 1 - Project Information

**Instructions for Completing**

**Part 1 – Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 – Project and Sponsor Information</b>			
Barry + Cathy Putnam			
Name of Action or Project: SUBDIVIDE PARCEL TO CREATE BUILDING LOT			
Project Location (describe, and attach a location map): 34 B, LANSING, NY			
Brief Description of Proposed Action: RETURN PARCEL TO APPROVED FLAG LOT 12-1-17.4. MOVE EASTERN BOUNDARY CREATE BUILDING LOT 1/6 ACRES FOR PURPOSE OF SALE AND A FUTURE HOME			
Name of Applicant or Sponsor: Barry & Cathy Putnam		Telephone: 607-793-3746	
		E-Mail: bputnam1547@gmail	
Address: 1547 RIDGE ROAD			
City/PO: LANSING		State: NY	Zip Code: 14882
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation?		NO	YES
If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency?		NO	YES
If Yes, list agency(s) name and permit or approval:		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. a. Total acreage of the site of the proposed action?		6.5 <del>12.4</del> acres	
b. Total acreage to be physically disturbed?		0 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		62 acres	12-1-17.4 12-1-17.2
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input checked="" type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations? b. Consistent with the adopted comprehensive plan?	NO	YES	NA
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels? b. Are public transportation services available at or near the site of the proposed action? c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: <u>APPROVED SEPTIC SYSTEM</u> _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?  b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply.

- Shoreline     Forest     Agricultural/grasslands     Early mid-successional
- Wetland     Urban     Suburban

15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

16. Is the project site located in the 100-year flood plan?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

17. Will the proposed action create storm water discharge, either from point or non-point sources?

If Yes,

a. Will storm water discharges flow to adjacent properties?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?

If Yes, briefly describe:

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_  
\_\_\_\_\_

18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?

If Yes, explain the purpose and size of the impoundment:

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_

19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?

If Yes, describe:

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_

20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?

If Yes, describe:

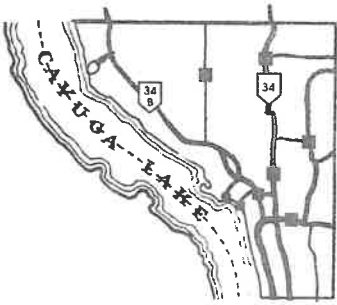
NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

\_\_\_\_\_

**I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor name: Barry F. Putnam Date: 4-12-2023

Signature: [Signature] Title: owner



# TOWN of LANSING

*"Home of Industry, Agriculture and Scenic Beauty"*

ZONING, PLANNING AND CODE ENFORCEMENT  
Box 186  
Lansing, NY 14882

E-mail: [tolcodes@tweny.rr.com](mailto:tolcodes@tweny.rr.com)

February 16, 2011

Barry & Cathy Putnam  
25 Murfield Drive  
Ithaca, New York 14850

Re: Approval of Variance request, Tax Parcel No. 12.-1-17.2, Ridge Road,  
Lansing, NY 14882.

Dear Mr. & Mrs. Putnam,

On February 15, 2011 the Town of Lansing Zoning Board of Appeals discussed your appeal and arrived at a final decision for your Area Variance request.

The Zoning Board's decision was to approve your request to allow for the driveway(s) to be over 500' in length.

Feel free to contact this office with any questions concerning this issue.

Sincerely,

Rachel Jacobsen  
Zoning Clerk

## AGRICULTURAL DATA STATEMENT

NYS Agricultural and Markets Law requires the submission of an agricultural data statement by an applicant to the municipality for a rezoning, special use permit, site plan approval, use variance, or subdivision of parcel(s) occurring on property within an agricultural district containing a farm operation or on property within 500 feet of an active farm operation located in an agricultural district.

Applicant's Name & Address	Owner's Name & Address <i>(if different from applicant)</i>

Type of Application	<input type="checkbox"/> Rezoning <input type="checkbox"/> Special Use Permit <input type="checkbox"/> Site Plan Approval <input type="checkbox"/> Use Variance <input type="checkbox"/> Subdivision Approval
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Project Description:

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Project Address:

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Project Location:

*(Example: west side of Main Street or 250 feet south of Second Avenue)*

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Project Size:

*(Square footage, acreage, etc.)*

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Current Use of Site:

*(Identify: idle, hay, pasture, crop, brushland, forest, dairy, tilled, orchard, single residence, etc.)*

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Town Of Lansing Planning Board
Application for Review and Approval of Subdivision

Check One: Subdivision Plat Fee Paid \$ Date
Boundary Change Receipt No.

1. Name or Identifying Title James Tull
2. Tax Parcel No. 9-1-1.2 Zoning District RA

3. Subdivider: (if owner, so state:
if agent or other type of relationship, state details on separate sheet)

Name & Title James Tull owner
Signature [Signature] Date 4/25/23
Address 365 Fenner Rd Lansing NY 14882
Phone 607 592 2810 Fax 607 592 2810 E-Mail 607 592 2810
Other Contact information

4. Licensed Land Surveyor:
Name: TG Miller P.C.
Address 203 North Aurora St. Ithaca NY 14850
Phone Fax E-Mail
Other Contact information

5. Engineer:
Name:
Address
Phone Fax E-Mail
Other Contact information

6. Easements or other restrictions on property: (Describe generally)
NYSEG power line easement

7. Names of abutting owners and owners directly across adjoining streets, including those
in other towns ( Available at Tompkins County Assessor's Office. Attach
additional sheets if necessary)
Visionquest Realty LLC 3266 RT 34 Scipio Center NY 13147
Willet Dairy LLC 2361 Genoa Lansing Townline Rd King Ferry NY 13081
William A Genung Living Trust 545 Davis Rd Lansing NY 14882
Nicholas Barra 286 Jerry Smith Rd Lansing NY 14882
John Joly 60 Dates Rd Lansing NY 14882

8. Requested exceptions: The Planning Board is hereby requested to authorize the
following exceptions to or waivers of its regulations governing Subdivisions
(attach list of exceptions with the reason for each exception set forth):

\* Note: Application, Fee and required documents must be received in
the Planning Office 21 days prior to the scheduled Planning Board Meeting.

## Short Environmental Assessment Form

### Part 1 - Project Information

**Instructions for Completing**

**Part 1 – Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 – Project and Sponsor Information</b>			
James Tull owner			
Name of Action or Project: subdivision of house with parcel from larger parcel			
Project Location (describe, and attach a location map): 365 Fenner Rd Lansing NY 14882			
Brief Description of Proposed Action: subdivision of existing house with parcel from larger parcel			
Name of Applicant or Sponsor:  James Tull		Telephone: 607-592-2810  E-Mail: jimtull1@gmail.com	
Address: 365 Fenner RD			
City/PO: Lansing		State: NY	Zip Code: 14882
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
3. a. Total acreage of the site of the proposed action?		6.7 acres	
b. Total acreage to be physically disturbed?		0 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		79.74 acres	
4. Check all land uses that occur on, are adjoining or near the proposed action:			
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input checked="" type="checkbox"/> Forest <input checked="" type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

		NO	YES	N/A
5. Is the proposed action,	a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?		NO	YES	
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? wetlands adjoining location		NO	YES	
If Yes, identify: _____		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels? b. Are public transportation services available at or near the site of the proposed action? c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?		NO	YES	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____		NO	YES	
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____		NO	YES	
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____		NO	YES	
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?		NO	YES	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO	YES	
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____				

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input type="checkbox"/> Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____ _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____ _____		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____ _____		
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
_____ _____		

**I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor/name: James Tull Date: 4/25/23  
 Signature: *James Tull* Title: owner

### AGRICULTURAL DATA STATEMENT

Per § 305-a of the New York State Agriculture and Markets Law, any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval that would occur on property within a New York State Certified Agricultural District containing a farm operation or property with boundaries within 500 feet of a farm operation located in an Agricultural District shall include an Agricultural Data Statement.

A. Name of applicant: James Tull  
Mailing address: 365 Fenner Rd  
Lansing NY 14882

B. Description of the proposed project: minor subdivision of house and lot from larger parcel

C. Project site address: 365 Fenner Rd Town: Lansing

D. Project site tax map number: 9.-1-1.2

E: The project is located on property:  
 within an Agricultural District containing a farm operation, or  
 with boundaries within 500 feet of a farm operation located in an Agricultural District.

F. Number of acres affected by project: 6.7

G. Is any portion of the project site currently being farmed?  
 Yes. If yes, how many acres \_\_\_\_\_ or square feet \_\_\_\_\_ ?  
 No.

H. Name and address of any owner of land containing farm operations within the Agricultural District and is located within 500 feet of the boundary of the property upon which the project is proposed.  
Visionquest Realty LLC 3266 Rt 34 Scipio Center NY 13147  
Willet Dairy LLC 2361 Genoa Lansing Townline Rd King Ferry NY 13081  
William A Genung Living Trust 545 Davis Rd Lansing NY 14882

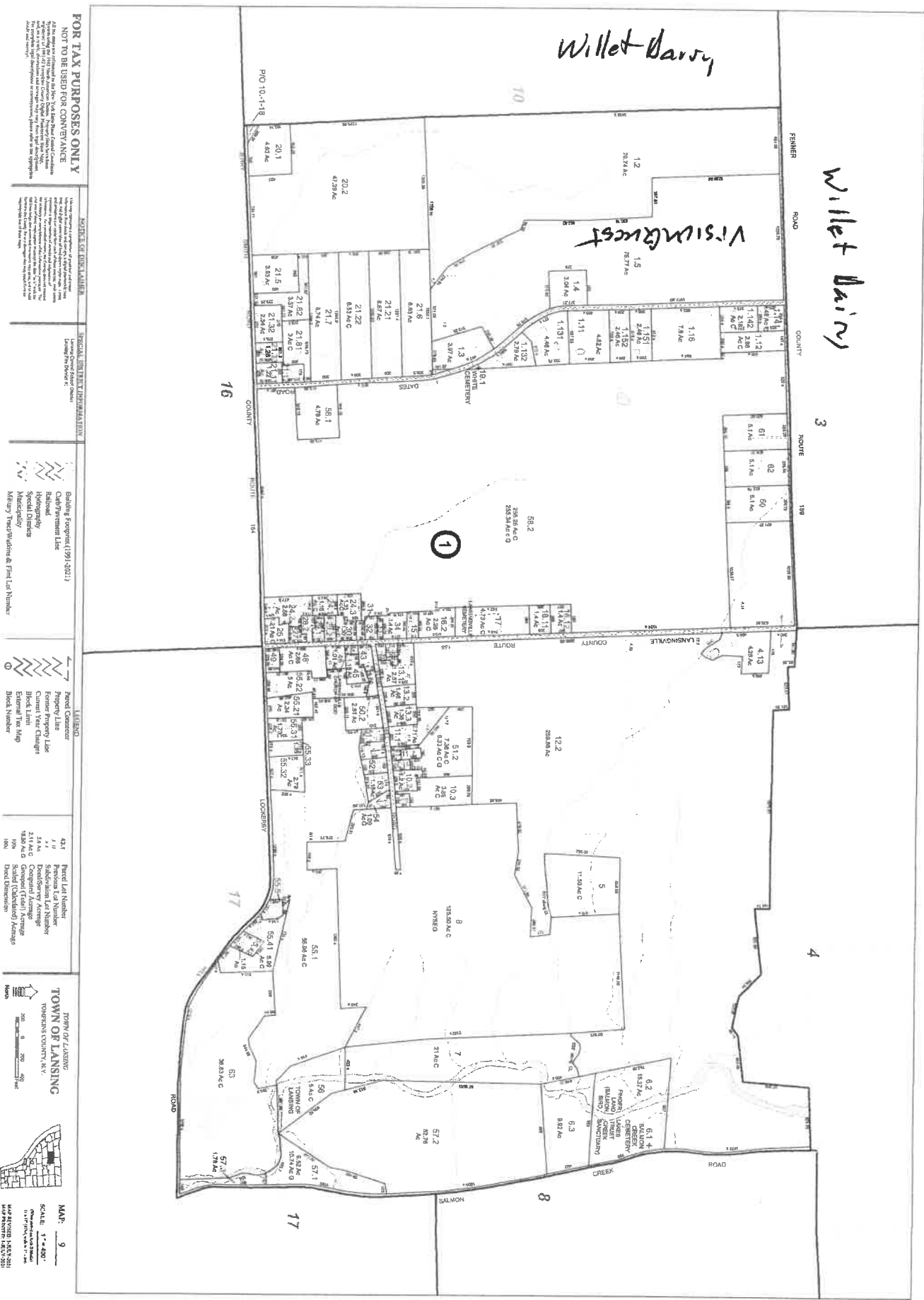
I. Attach a copy of the current tax map showing the site of the proposed project relative to the location of farm operations identified in Item H above.

-----  
**FARM NOTE**

Prospective residents should be aware that farm operations may generate dust, odor, smoke, noise, vibration and other conditions that may be objectionable to nearby properties. Local governments shall not unreasonably restrict or regulate farm operations within State Certified Agricultural Districts unless it can be shown that the public health or safety is threatened.  
-----

James Tull owner  
Name and Title of Person Completing Form

4/25/23  
Date



**FOR TAX PURPOSES ONLY**  
 NOT TO BE USED FOR CONVEYANCE

This map is prepared for the purpose of showing the location of parcels for tax purposes only. It is not intended to be used for conveyance purposes. The boundaries shown on this map are based on the best available information and are not guaranteed. The user of this map should consult the official records of the County Assessor's Office for the most accurate information.

**NOTICE OF BENEFICIAL INTEREST**

This map is prepared for the purpose of showing the location of parcels for tax purposes only. It is not intended to be used for conveyance purposes. The boundaries shown on this map are based on the best available information and are not guaranteed. The user of this map should consult the official records of the County Assessor's Office for the most accurate information.

**SPECIAL DISTRICT INFORMATION**

Building Exemption (1991-2021)

- Charterment Line
- Railroad
- Hydrogen
- Special Districts
- Military Tract/Veterans & First-Land Number

**LEGEND**

- Parcel Line Number
- Property Line
- Current Property Line
- Current Year Changes
- Block Line
- External Tax Map
- Block Number

**Parcel Line Number**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**Property Line**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**Current Property Line**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**Current Year Changes**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**Block Line**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**External Tax Map**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

**Block Number**

- 421
- 11
- 18 A-C
- 18 D-C
- 1001

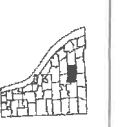
**TOWN OF LAINING**

TOVNSHIP COUNTY, OR.

MAP: 9

SCALE: 1"=400'

DATE PRINTED: 10/27/2011





PROPOSED SUBDIVISION  
LANDS OF  
LUCENTE HOLDINGS, INC.

TOWN OF LANSING  
COUNTY OF TOMPKINS  
STATE OF NEW YORK  
TAX MAP NOS. 39.-1-38.8  
AND 39.-1-38.16  
REFERENCE DEEDS: L.895/P.150  
AND L.811/P.283

REFERENCE SURVEYS:

1. "REVISED PLANS OF VILLAGE APARTMENTS...", MADE BY HOWARD SCHLEIBER, P.E., L.S., DATED APRIL 18, 1975, REVISED APRIL 12, 1976.
2. "SURVEY MAP, HIGHWAY DEDICATION VILLAGE CIRCLE & VILLAGE PLACE...", MADE BY LAWRENCE FABBRONI, P.E., L.S., DATED DECEMBER 20, 2016.

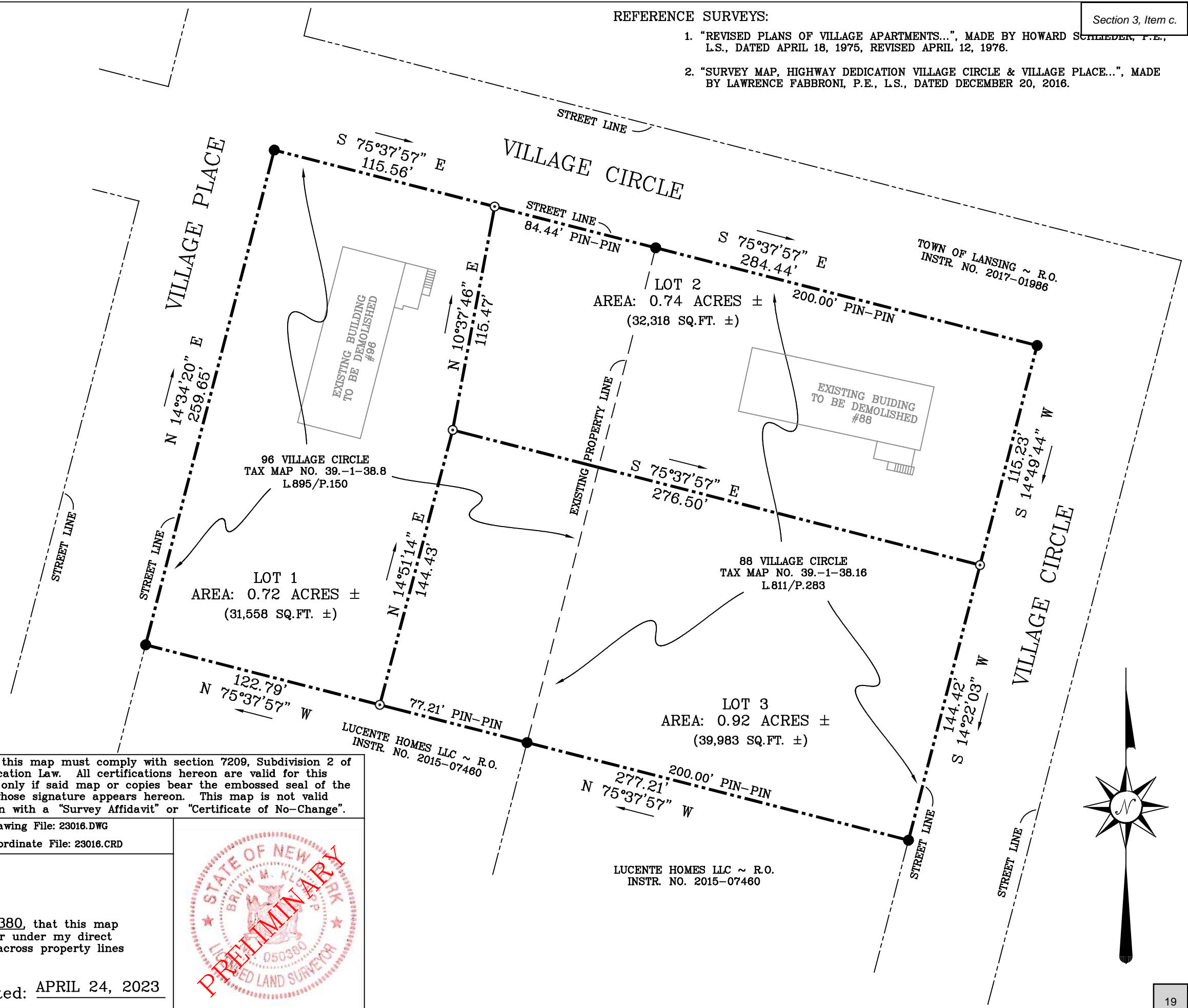
Section 3, Item c.

LEGEND:

- EXISTING PIN
- ⊙ SET 5/8" REBAR AND SURVEY CAP
- R.O. REPUTED OWNER



GRAPHIC SCALE



OWASCO LAND SURVEYING  
52 HART DRIVE  
FREEVILLE, NEW YORK 13068  
PHONE: (607) 898-5051  
email: owascos@outlook.com

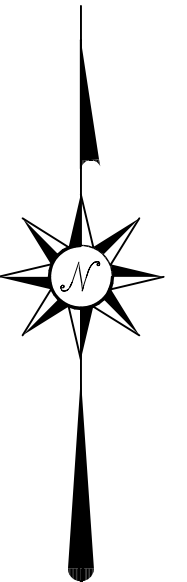
NOTE: Any revisions to this map must comply with section 7209, Subdivision 2 of the New York State Education Law. All certifications hereon are valid for this map and copies thereof only if said map or copies bear the embossed seal of the licensed land surveyor whose signature appears hereon. This map is not valid when used in conjunction with a "Survey Affidavit" or "Certificate of No-Change".

Drawn By: BMK	Scale: 1"=50'	Job No.: 23-016	Drawing File: 23016.DWG
			Coordinate File: 23016.CRD

I hereby certify to LUCENTE HOLDINGS, INC.

that I am a licensed land surveyor, New York State License No. 050380, that this map correctly delineates an actual survey on the ground made by me or under my direct supervision, and that I found no visible encroachments either way across property lines except as shown hereon.

Signed: Brian M. Klump Dated: APRIL 24, 2023  
"Copyright 2023: All Rights Reserved, Owasco Land Surveying"



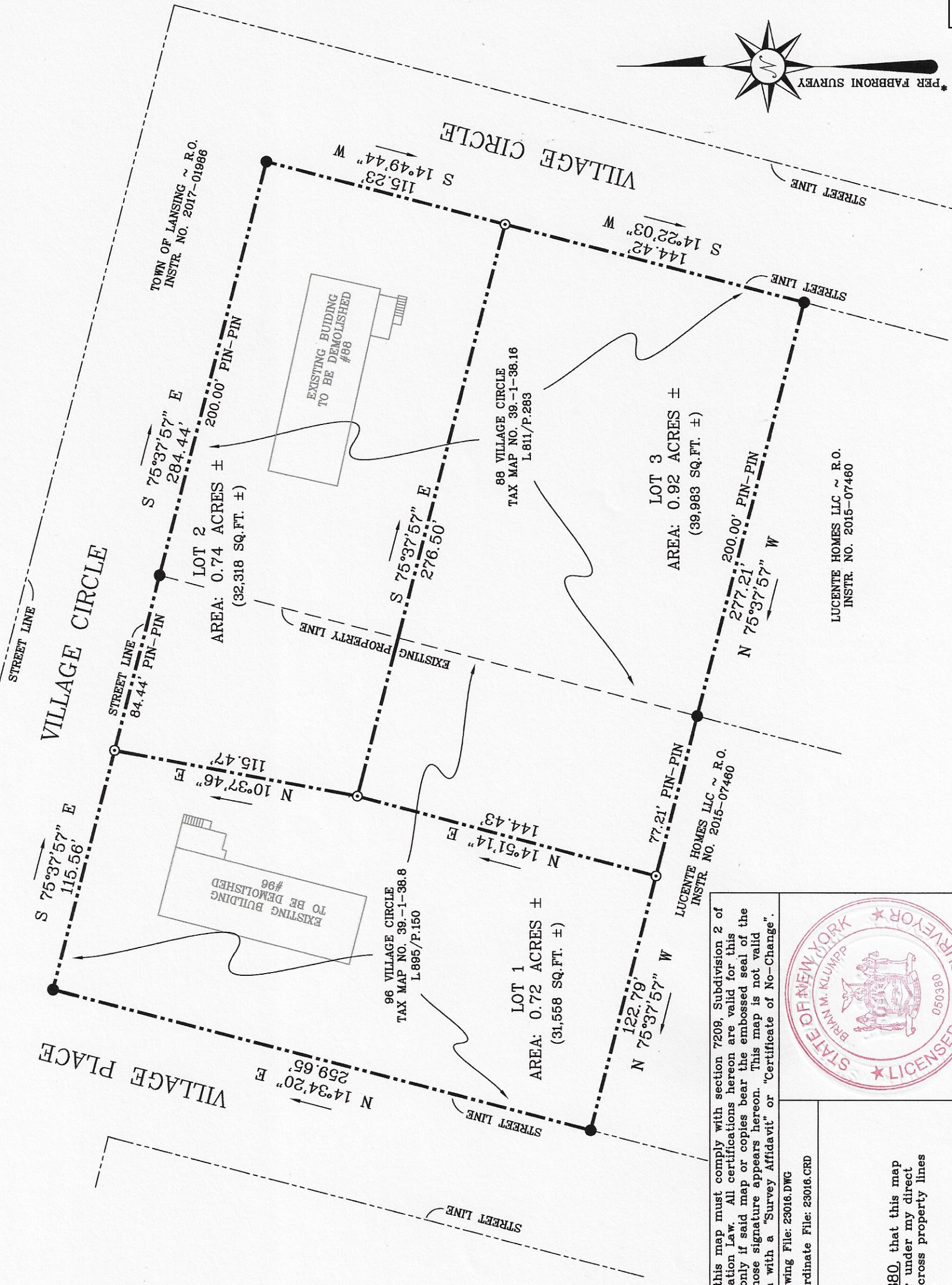


**PROPOSED SUBDIVISION  
LANDS OF  
LUCENTE HOLDINGS, INC.**

TOWN OF LANSING  
COUNTY OF TOMPKINS  
STATE OF NEW YORK  
TAX MAP NOS. 39.-1-38.8  
AND 39.-1-38.16  
REFERENCE DEEDS: L.895/P.150  
AND L.811/P.283

**REFERENCE SURVEYS:**

1. "REVISED PLANS OF VILLAGE APARTMENTS...", MADE BY HOWARD SCHLIEDER, P.E., L.S., DATED APRIL 16, 1975, REVISED APRIL 12, 1976.
- \*2. "SURVEY MAP, HIGHWAY DEDICATION VILLAGE CIRCLE & VILLAGE PLACE...", MADE BY LAWRENCE FABBRONI, P.E., L.S., DATED DECEMBER 20, 2016.



GRAPHIC SCALE

**LEGEND:**

- EXISTING PIN
- SET 5/8" REBAR AND SURVEY CAP
- R.O. REPUTED OWNER

OWASCO LAND SURVEYING  
52 HART DRIVE  
FREEVILLE, NEW YORK 13068  
PHONE: (607) 898-5051  
email: owascos@outlook.com

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Signed: *Brian M. Klumpp* Dated: APRIL 24, 2023  
"Copyright 2023: All Rights Reserved, Owasco Land Surveying"



\*PER FABBRONI SURVEY



Town Of Lansing Planning Board
Application for Review and Approval of Subdivision

Check One: Subdivision Plat Fee Paid \$ Date 4/26/2023
Boundary Change Receipt No.

1. Name or Identifying Title Village Solars Phase VIIB&C
2. Tax Parcel No. 39.1-38.8, 38.-1-38.16 Zoning District VCVS PDA

3. Subdivider: (if owner, so state:
if agent or other type of relationship, state details on separate sheet)
Name & Title Rocco Lucente, Owner & Senior VP, Village Solars LLC
Signature Rocco Lucente Date 4/26/2023
Address 381 Hagadorn Hill Road Spencer, NY 14883
Phone Fax E-Mail
Other Contact information 607-229-4822, 607-256-5821, lucenterocco@yahoo.com

4. Licensed Land Surveyor:
Name: Brian Klumpp
Address 52 Hart Drive Freeville, NY 13068
Phone Fax E-Mail
Other Contact information 607-898-5051, owascols@outlook.com

5. Engineer:
Name: Timothy Buhl
Address 35 Fire Lane 24 Auburn, NY 13021
Phone Fax E-Mail
Other Contact information 607-423-1919, tcbuhl@verizon.net

6. Easements or other restrictions on property: (Describe generally)
Cross easements granting access to common features (trails, community center) throughout PDA

7. Names of abutting owners and owners directly across adjoining streets, including those
in other towns ( Available at Tompkins County Assessor's Office. Attach
additional sheets if necessary)
Village Solars LLC, 102-116 Village Circle, Ithaca NY 14850
Rocco P Lucente Estate, 37 Village Place, Ithaca NY 14850
Village Solars LLC, 99 Village Circle, Ithaca NY 14850
Village Solars LLC, 36 Village Place, Ithaca NY 14850

8. Requested exceptions: The Planning Board is hereby requested to authorize the
following exceptions to or waivers of its regulations governing Subdivisions
(attach list of exceptions with the reason for each exception set forth):
None

\* Note: Application, Fee and required documents must be received in
the Planning Office 21 days prior to the scheduled Planning Board Meeting.

### Subdivision Application Procedure

#### Subdivision Plat Requirements.

Materials for Subdivision Review shall be submitted to the Planning Department at least twenty-one (21) days in advance of the Planning Board meeting and shall include;

1. \_\_\_\_\_ Subdivision Application (Received); \_\_\_\_\_ Complete
2. \_\_\_\_\_ Subdivision Plat of the proposed Subdivision (Details below)
3. \_\_\_\_\_ SEQR For: Completed and signed Short Environmental Assessment Form, Part 1 (SEAF), or Long Environmental Assessment For, Part I (LEAF). (Consult with Planning Department as to which to submit)
4. \_\_\_\_\_ Agricultural Data Statement if site is in an Agricultural District
5. \_\_\_\_\_ Payment of Application Fee
6. \_\_\_\_\_ Applicant should be provided with "information regarding Lansing Pathway Planning".

The Application and Subdivision Plat shall contain the following information:

- a. \_\_\_\_\_ Name and address of the landowner of record and the applicant, if not the same. Scale of the drawing(s), north arrow, and date.
- b. \_\_\_\_\_ An identification map showing the location and orientation of the proposed development relative to the local road system and pathway plan (See information regarding Lansing Pathway Planning). A tax map or USGS map may be adequate for this purpose.
- c. \_\_\_\_\_ Location of the site in relation to abutting properties and roads. Show existing property lines, right of-way, easements and the names of current owners of adjacent property and property on the opposite side of the road serving the site.
- d. \_\_\_\_\_ Gross acreage of the parcel to be subdivided.
- e. \_\_\_\_\_ Existing and proposed buildings, structures and land uses on the site and on adjacent properties.
- f. \_\_\_\_\_ The location of any floodplain, NYSDEC mapped state wetlands and/or federal mapped wetlands designated by the National Flood Insurance Program.
- g. \_\_\_\_\_ The location of any areas either recognized or designated by the Town of Lansing Planning Board as Unique Natural Areas as may be set forth in the Tompkins County Inventory of Unique Natural Areas. In addition, provide location of any CEAs and New York State Historic Preservation Office (SHPO ) mapped historic archeological, and cultural resources located at or near the site.
- h. \_\_\_\_\_ Indication of existing and proposed topography and drainage systems for the site.
- i. \_\_\_\_\_ Proposed storm water drainage from the site. Applicant shall delineate the area of proposed soil disturbance, including landscaping and proposed lawn. A stormwater management plan, consistent with the Town's local stormwater and erosion control local law and NYSDEC SPEDES permit requisites is required. A full SWPPP is currently required for a 2 acre or more soil disturbance pursuant to the Town's Local Stormwater and Erosion Control Local Law Number 6 of 2009. Soil disturbance includes landscaping and lawn placement.



# AGRICULTURAL DATA STATEMENT

Per § 305-a of the New York State Agriculture and Markets Law, any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval that would occur on property within a New York State Certified Agricultural District containing a farm operation or property with boundaries within 500 feet of a farm operation located in an Agricultural District shall include an Agricultural Data Statement.

A. Name of applicant: Rocco Lucente  
Mailing address: 381 Hagadorn Hill Road, Spencer NY 14883

B. Description of the proposed project: We seek to subdivide the parcels at 88 & 96 Village Circle for the purpose of tearing down two buildings and replacing it with three buildings, each on their own parcel.

C. Project site address: 88 & 96 Village Circle Town: Lansing

D. Project site tax map number: 39.-1-38.8, 39.-1-38.16

E. The project is located on property:  
 within an Agricultural District containing a farm operation, or  
 with boundaries within 500 feet of a farm operation located in an Agricultural District.

F. Number of acres affected by project: 2.34

G. Is any portion of the project site currently being farmed?  
 Yes. If yes, how many acres \_\_\_\_\_ or square feet \_\_\_\_\_ ?  
 No.

H. Name and address of any owner of land containing farm operations within the Agricultural District and is located within 500 feet of the boundary of the property upon which the project is proposed.

N/A

I. Attach a copy of the current tax map showing the site of the proposed project relative to the location of farm operations identified in Item H above.

~~~~~  
**FARM NOTE**

Prospective residents should be aware that farm operations may generate dust, odor, smoke, noise, vibration and other conditions that may be objectionable to nearby properties. Local governments shall not unreasonably restrict or regulate farm operations within State Certified Agricultural Districts unless it can be shown that the public health or safety is threatened.  
~~~~~

Rocco Lucente  
Name and Title of Person Completing Form

4/26/2023  
Date

# Short Environmental Assessment Form

## Part 1 - Project Information

**Instructions for Completing** - Go to [www.DEC.NY.Gov/caf\\_mapper/](http://www.DEC.NY.Gov/caf_mapper/) Fill out from there.

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b> Rocco Lucente, Owner & Senior VP, Village Solars LLC							
Name of Action or Project: 88/96 Village Circle Subdivision							
Project Location (describe, and attach a location map): 88+96 Village Circle Ithaca, NY 14850							
Brief Description of Proposed Action:							
Name of Applicant or Sponsor: Rocco Lucente		Telephone: 607-223-4822					
Address: 381 Hagadorn Hill Rd		E-Mail: <a href="mailto:lucente.rocco@yahoo.com">lucente.rocco@yahoo.com</a>					
City/PO: Spencer		State: NY	Zip Code: 14883				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1"> <tr><th>NO</th><th>YES</th></tr> <tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval:			<table border="1"> <tr><th>NO</th><th>YES</th></tr> <tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	NO	YES	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NO	YES						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
3.a. Total acreage of the site of the proposed action?		2.34 acres					
b. Total acreage to be physically disturbed?		2.34 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		2.34 acres					
4. Check all land uses that occur on, adjoining and near the proposed action.							
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland							



5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____	<input type="checkbox"/> NO	<input type="checkbox"/> YES	

<p>18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____</p>	NO	YES
<p>19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____</p>	NO	YES
<p>20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____</p>	NO	YES

**I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE**

Applicant/sponsor name: Rocco Vucenite

Date: 4/26/23

Signature: Rocco Vucenite



# C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 Century Hill Drive, Latham, NY 12110  
518.786.7400 FAX 518.786.7299 www.ctmale.com



March 24, 2023

Town of Lansing Planning Board  
c/o Mr. John Zepko  
Director of Planning and Code Enforcement  
Lansing Town Hall  
29 Auburn Road  
Lansing, NY 14882  
Email: [jzepko@lansingtown.com](mailto:jzepko@lansingtown.com)

Re: Preliminary Submission: Site Plan Approval  
Lansing Community Solar Project  
Lansingville Road, Town of Lansing, NY  
C.T. Male Project No: 22.2303

Dear John:

On behalf of Genie Solar Energy and Lansing Community Solar, LLC (Applicant), enclosed please find the following materials that represent an initial submission for Site Plan Approval of a 5.0-megawatt (MW) AC solar farm proposed off Lansingville Road in the Town of Lansing, Tompkins County, New York. A brief project narrative is included after this cover letter.

List of Attachments	
Site Plan Application Form	Attachment 1
Agricultural Data Statement	Attachment 2
Preliminary Site Plans (14 Sheets)	Attachment 3
Visibility Analysis	Attachment 4
Part 1 Full Environmental Assessment Form (EAF)	Attachment 5
Wetland Delineation Map	Attachment 6
Utility Submission & Electrical Line Drawings	Attachment 7
Solar Equipment Datasheets	Attachment 8
Coordinated Electrical Solar Interconnect Review (CESIR) (Redacted)	Attachment 9
Letter of Intent to Lease (Redacted)	Attachment 10
Draft Operations & Maintenance (O&M) Plan	Attachment 11
Draft Decommissioning Plan	Attachment 12
Draft Stormwater Pollution Prevention Plan (SWPPP)	Attachment 13

As consultants for the Applicant, we look forward to working with the Planning Board on developing this solar energy installation. We request to be placed on the agenda at the next Planning Board meeting, scheduled for April 24, 2023, to meet with Board members and introduce the project. Required fees will come from the Applicant directly at your request. If you have any questions regarding these initial application documents, please contact me at 518-786-7649 or [c.koenig@ctmale.com](mailto:c.koenig@ctmale.com).

C.T. MALE ASSOCIATES

*Site Plan Approval Application  
Preliminary Submission  
Lansing Community Solar Project  
Page - 2*

**C.T. MALE ASSOCIATES**

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.



Chris Koenig  
Project Manager

cc: Nathan Knapke (Genie Solar Energy/ Applicant)

## C.T. MALE ASSOCIATES

*Site Plan Approval Application  
Preliminary Submission  
Lansing Community Solar Project  
Page - 3*

### **Project Narrative**

The proposed project is the development and construction of a 5.0-megawatt (MW) AC ground-mounted community solar farm. The project will be located on leased portions of an agricultural parcel that is ±107.2 acres and is owned by Turek Farms (Parcel ID# 16.-1-19.2) and is located off the west side of Lansingville Road between Jerry Smith Road and Dublin Road. The leased project site consists of cultivated agricultural field (most recently corn) and an existing gravel farm road. The project will be situated adjacent to the off-site solar farm that was recently constructed off Jerry Smith Road and will be separated from this installation by a mature hedgerow treeline and open setbacks. The proposed project meets the design standards and permitting requirements outlined in Local Law No. 3 of 2020 (“Town Solar Law”) as a “Solar Energy Facility”.

The solar energy facility will encompass ±18 acres (±17%) of the parcel and will be secured by an 8-foot-tall agricultural-style perimeter fence with a locking gate. Access to the project from Lansingville Road will be gained from a proposed pervious gravel access road that will be constructed at the location of an existing farm road in the northeast corner of the parcel. The solar panels will be ground-mounted on a single-axis tracking (SAT) racking system, which will be driven or screwed into the ground, limiting site disturbance. The electrical interconnect from the solar array is proposed to be to an existing overhead electrical circuit located within the project parcel near the frontage with Lansingville Road. Electrical lines within the site will be underground, except for at the utility interconnection poles near the front portion of the site as required by NYSEG. Electrical equipment (transformers, switchgear, inverters) will be pad-mounted at two (2) locations within the fenced area, central to the array.

To substantially screen and blend the array components with the existing landscape, a dense evergreen tree screen is proposed around portions of the array with potential visibility from Lansingville Road and adjoining residential properties. Also to minimize visual impact, the pad-mounted electrical equipment is set back into the interior of the site and situated behind panels, limiting its visibility. No tree clearing is proposed in conjunction with this site and no impacts to aquatic resources at the site will occur.

At the local level, the project will generate clean, renewable electricity that will be added into the local electric grid (N. Lansing substation and feeder) for local consumption and will provide financial benefits to the Town. At the County level, the project will contribute to certain goals of the Tompkins County Energy Strategy, namely moving toward local renewable energy generation. At the State level, the project will contribute to the New York State goal of achieving at least 10 gigawatts of distributed solar energy by 2030.

APPLICATION FOR SITE DEVELOPMENT PLAN APPROVAL

Preliminary X Date: 3/24/2023 Final      Date:           

Name of Proposed Development: Lansing Community Solar Project

Applicant:

Plans prepared by:

Name: Lansing Community Solar LLC  
Address: 520 Broad Street  
Newark, NJ 07102  
Telephone: 419-508-1405

Name: C.T. Male Associates  
Address: 50 Century Hill Drive  
Latham, NY 12110  
Telephone: 518-786-7649

Owner (if different)

(If more than one owner, provide information for each)

Name: Turek Farms LLC  
Address: 8558 State Route 90  
King Ferry, NY 13081  
Telephone: 315-364-8735

Ownership intentions – i.e., purchase options: Lease area within parcel

Location of site: Lansingville Road between Jerry Smith Road and Dublin Road.  
Off the west side of Lansingville Road

Tax map description

Section: 16 Block: 1 Lot: 19.2

Current zoning classification: RA

State and federal permits needed (list type and appropriate department)  
NYSDEC: SPDES Stormwater General Permit

Proposed use of site: 5.0 MW AC ground mounted solar farm

Total site area (square feet or acres) 107.2 (piece north of NYSEG parcel)

Anticipated construction time: Q4 2023

Will development be staged? No

Current land use of site (agriculture, commercial, undeveloped, etc.)  
Agriculture: cultivation

Current condition of site (buildings, brush etc.) Corn field

Character of surrounding lands (suburban, agriculture, wetlands, etc.)  
Rural residential, solar farm, undeveloped/wooded, agricultural

Estimated cost of proposed improvement: \$ 3-4 million

Anticipated increase in number of residents, shoppers, employees, etc. (as applicable)  
N/A. The solar farm is a passive land use.

Describe proposed use including primary use, ground floor area, height and number of stories for each building:

- for residential buildings, include number of dwelling units by size (efficiency, one bedroom, two bedroom, three or more bedrooms) and number of parking spaces to be provided.
- for non-residential buildings, include total floor area, total sales area, number of automobile and truck parking spaces.
- other proposed structures.

The solar farm will be approximately 18 acres within the fence line, including row spacing and setbacks from the fence line. An existing farm road will be improved to provide access to the array from Lansingville Road. Vehicle turn-arounds will be provided inside and outside of the fence line.

**AGRICULTURAL DATA STATEMENT**

Section 3, Item d.

Per § 305-a of the New York State Agriculture and Markets Law, any application for a special use permit, site plan approval, use variance, or subdivision approval requiring municipal review and approval that would occur on property within a New York State Certified Agricultural District containing a farm operation or property with boundaries within 500 feet of a farm operation located in an Agricultural District shall include an Agricultural Data Statement.

A. Name of applicant: Lansing Community Solar LLC  
Mailing address: 520 Broad Street, Newark, NJ 07102

B. Description of the proposed project: \_\_\_\_\_  
**5.0 MW AC ground mounted solar farm**

C. Project site address: Lansingville Road Town: Lansing

D. Project site tax map number: 16.-1-19.2

E. The project is located on property:  
 within an Agricultural District containing a farm operation, or  
 with boundaries within 500 feet of a farm operation located in an Agricultural District.

F. Number of acres affected by project: 22.53 ac. (total disturbance), 18 ac. (area in fenceline)

G. Is any portion of the project site currently being farmed?  
 Yes. If yes, how many acres 22.53 ac. or square feet \_\_\_\_\_ ?  
 No. **The entire parcel is farmed for agricultural cultivation (corn field)**

H. Name and address of any owner of land containing farm operations within the Agricultural District and is located within 500 feet of the boundary of the property upon which the project is proposed.

[17.-1-4.2] Jeffrey Cook, 507 Salmon Creek Road, Lansing, NY 14882

[17.-1-7.1] VIsionquest Realty, LLC, 3266 Route 34, Scipio Center, NY 13147

I. Attach a copy of the current tax map showing the site of the proposed project relative to the location of farm operations identified in Item H above.

**FARM NOTE**

Prospective residents should be aware that farm operations may generate dust, odor, smoke, noise, vibration and other conditions that may be objectionable to nearby properties. Local governments shall not unreasonably restrict or regulate farm operations within State Certified Agricultural Districts unless it can be shown that the public health or safety is threatened.



**3/24/2023**

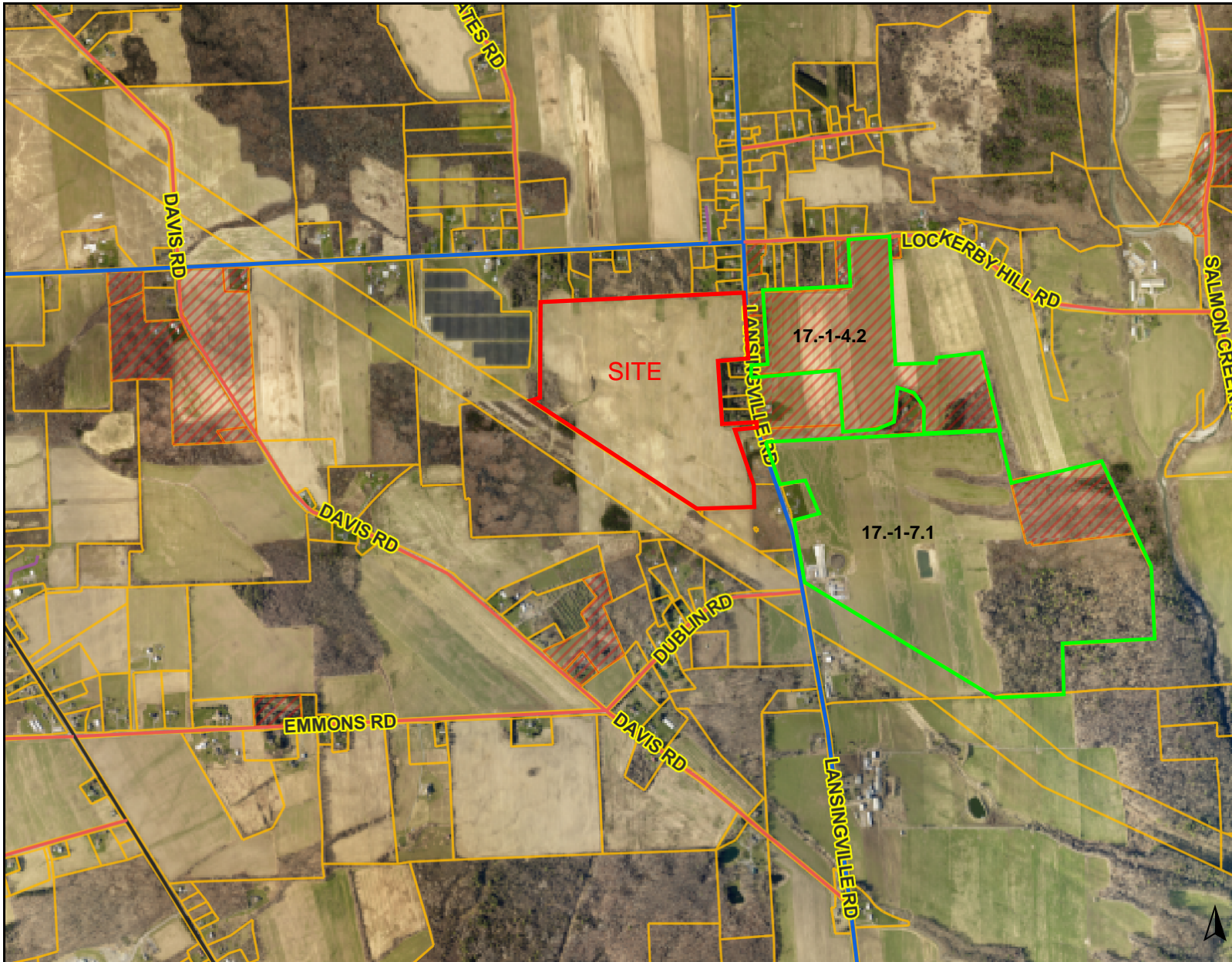
\_\_\_\_\_  
Name and Title of Person Completing Form

\_\_\_\_\_  
Date



# LANSING COMMUNITY SOLAR PROJECT: AG DATA STATEMENT MAP

Section 3, Item d.



## Legend

### TC Roads

- City of Ithaca
- Cornell University
- Town
- Town Outside
- NYS DOT
- Tompkins County
- County Outside
- Private
- Village
- Village Outside
- Not Maintained
- Ithaca College
- State Park
- TC3

### New Parcels

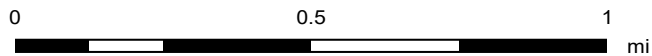


### Parcels



**FARMING OPERATIONS  
WITHIN 500 FT OF  
PROJECT PARCEL**

## Notes



1: 27896

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



**Full Environmental Assessment Form  
Part 1 - Project and Setting**

Section 3, Item d.

**Instructions for Completing Part 1**

**Part 1 is to be completed by the applicant or project sponsor.** Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

**A. Project and Applicant/Sponsor Information.**

Name of Action or Project: Lansing Community Solar Project		
Project Location (describe, and attach a general location map): Lansingville Road. Off the west side of Lansingville Road between Jerry Smith Road and Dublin Road. Tax ID: 16.-1-19.2		
Brief Description of Proposed Action (include purpose or need): The proposed action is the construction of a 5.0 MW AC ground-mounted solar farm on portions of a 107.2-acre agricultural parcel. The solar farm components include solar panels connected to a single-axis tracking (SAT) racking system, an agricultural-style perimeter fence, a pervious gravel access road, vegetative screening trees, underground wiring, and overhead utility interconnection equipment. The solar farm will encompass 18 acres within the fence line. The power that is generated will be added to the existing grid at the N. Lansing substation for local consumption. The remainder of the parcel will continue as agricultural cultivation.		
Name of Applicant/Sponsor: Genie Solar Energy o/b/o Lansing Community Solar LLC	Telephone: SEE CONTACT BELOW	
	E-Mail: SEE CONTACT BELOW	
Address: 520 Broad Street		
City/PO: Newark	State: NJ	Zip Code: 07102
Project Contact (if not same as sponsor; give name and title/role): Nathan Knapke, Director of Community Solar	Telephone: 419-508-1405	
	E-Mail: nknepke@geniesolarenergy.com	
Address: 520 Broad Street		
City/PO: Newark	State: NJ	Zip Code: 07102
Property Owner (if not same as sponsor): Turek Farms LLC (Jason Turek)	Telephone:	
	E-Mail:	
Address: 8558 State Route 90		
City/PO: King Ferry	State: NY	Zip Code: 13081



**B. Government Approvals**

<b>B. Government Approvals, Funding, or Sponsorship.</b> (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village Planning Board or Commission <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lansing Planning Board: Site Plan Approval	March 2023
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
d. Other local agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lansing Building Department: Soil Disturbance Permit; Building Permit	TBD Prior to Construction
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Tompkins Co. Planning Board: GML 239(m) Review; Tompkins Co. IDA: Potential PILOT	TBD
f. Regional agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Lansing School District: Potential PILOT	TBD
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDEC: SPDES Stormwater General Permit NYSHPO: Project Review/Consultation	TBD Prior to Construction In-progress
h. Federal agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**C. Planning and Zoning**

<b>C.1. Planning and zoning actions.</b>
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>
<ul style="list-style-type: none"> <li>• <b>If Yes</b>, complete sections C, F and G.</li> <li>• <b>If No</b>, proceed to question C.2 and complete all remaining sections and questions in Part 1</li> </ul>
<b>C.2. Adopted land use plans.</b>
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>
If Yes, identify the plan(s):
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
If Yes, identify the plan(s):
Town of Lansing Agriculture & Farmland Protection Plan (2015)
<hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/> <hr style="border: 0; border-top: 1px solid black; margin-bottom: 5px;"/>

**C.3. Zoning**

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a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance.  
If Yes, what is the zoning classification(s) including any applicable overlay district?

Yes  No

RA (Rural Agricultural)

b. Is the use permitted or allowed by a special or conditional use permit?

Yes  No

c. Is a zoning change requested as part of the proposed action?

Yes  No

If Yes,

i. What is the proposed new zoning for the site?

**C.4. Existing community services.**

a. In what school district is the project site located? Lansing Central School District

b. What police or other public protection forces serve the project site?

Tompkins County Sheriff, NYS Police

c. Which fire protection and emergency medical services serve the project site?

Lansing Fire Department

d. What parks serve the project site?

None directly. Those located regionally.

**D. Project Details**

**D.1. Proposed and Potential Development**

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? 5.0 MW solar farm

b. a. Total acreage of the site of the proposed action? 22.5 acres

b. Total acreage to be physically disturbed? 22.5 acres

c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 149.5 acres

c. Is the proposed action an expansion of an existing project or use?

Yes  No

i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % Units:

d. Is the proposed action a subdivision, or does it include a subdivision?

Yes  No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed?

Yes  No

iii. Number of lots proposed?

iv. Minimum and maximum proposed lot sizes? Minimum Maximum

e. Will the proposed action be constructed in multiple phases?

Yes  No

i. If No, anticipated period of construction: months

ii. If Yes:

- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition) month year
- Anticipated completion date of final phase month year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

f. Does the project include new residential uses?

If Yes, show numbers of units proposed.

Yes  No  
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One Family      Two Family      Three Family      Multiple Family (four or more)

Initial Phase \_\_\_\_\_  
At completion \_\_\_\_\_  
of all phases \_\_\_\_\_

g. Does the proposed action include new non-residential construction (including expansions)?  Yes  No

If Yes,

- i. Total number of structures NONE      **APPROX. SOLAR PANEL ROW DIMENSIONS**
- ii. Dimensions (in feet) of largest proposed structure: 18 MAX height; 14 width; and 344 length
- iii. Approximate extent of building space to be heated or cooled: \_\_\_\_\_ NONE square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?  Yes  No

If Yes,

- i. Purpose of the impoundment: \_\_\_\_\_
- ii. If a water impoundment, the principal source of the water:  Ground water  Surface water streams  Other specify: \_\_\_\_\_
- iii. If other than water, identify the type of impounded/contained liquids and their source. \_\_\_\_\_
- iv. Approximate size of the proposed impoundment. Volume: \_\_\_\_\_ million gallons; surface area: \_\_\_\_\_ acres
- v. Dimensions of the proposed dam or impounding structure: \_\_\_\_\_ height; \_\_\_\_\_ length
- vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): \_\_\_\_\_

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)  Yes  No

If Yes:

- i. What is the purpose of the excavation or dredging? \_\_\_\_\_
- ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
  - Volume (specify tons or cubic yards): \_\_\_\_\_
  - Over what duration of time? \_\_\_\_\_
- iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. \_\_\_\_\_
- iv. Will there be onsite dewatering or processing of excavated materials?  Yes  No  
If yes, describe. \_\_\_\_\_
- v. What is the total area to be dredged or excavated? \_\_\_\_\_ acres
- vi. What is the maximum area to be worked at any one time? \_\_\_\_\_ acres
- vii. What would be the maximum depth of excavation or dredging? \_\_\_\_\_ feet
- viii. Will the excavation require blasting?  Yes  No
- ix. Summarize site reclamation goals and plan: \_\_\_\_\_

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area?  Yes  No

If Yes:

- i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): \_\_\_\_\_

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or \_\_\_\_\_

iii. Will the proposed action cause or result in disturbance to bottom sediments?  Yes  No  
If Yes, describe: \_\_\_\_\_

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation?  Yes  No  
If Yes:  
• acres of aquatic vegetation proposed to be removed: \_\_\_\_\_  
• expected acreage of aquatic vegetation remaining after project completion: \_\_\_\_\_  
• purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): \_\_\_\_\_  
• proposed method of plant removal: \_\_\_\_\_  
• if chemical/herbicide treatment will be used, specify product(s): \_\_\_\_\_

v. Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

c. Will the proposed action use, or create a new demand for water?  Yes  No  
If Yes:

i. Total anticipated water usage/demand per day: \_\_\_\_\_ gallons/day

ii. Will the proposed action obtain water from an existing public water supply?  Yes  No  
If Yes:

- Name of district or service area: \_\_\_\_\_
- Does the existing public water supply have capacity to serve the proposal?  Yes  No
- Is the project site in the existing district?  Yes  No
- Is expansion of the district needed?  Yes  No
- Do existing lines serve the project site?  Yes  No

iii. Will line extension within an existing district be necessary to supply the project?  Yes  No  
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_
- Source(s) of supply for the district: \_\_\_\_\_

iv. Is a new water supply district or service area proposed to be formed to serve the project site?  Yes  No  
If Yes:

- Applicant/sponsor for new district: \_\_\_\_\_
- Date application submitted or anticipated: \_\_\_\_\_
- Proposed source(s) of supply for new district: \_\_\_\_\_

v. If a public water supply will not be used, describe plans to provide water supply for the project: \_\_\_\_\_

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: \_\_\_\_\_ gallons/minute.

d. Will the proposed action generate liquid wastes?  Yes  No  
If Yes:

i. Total anticipated liquid waste generation per day: \_\_\_\_\_ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): \_\_\_\_\_

iii. Will the proposed action use any existing public wastewater treatment facilities?  Yes  No  
If Yes:

- Name of wastewater treatment plant to be used: \_\_\_\_\_
- Name of district: \_\_\_\_\_
- Does the existing wastewater treatment plant have capacity to serve the project?  Yes  No
- Is the project site in the existing district?  Yes  No
- Is expansion of the district needed?  Yes  No

- Do existing sewer lines serve the project site?
- Will a line extension within an existing district be necessary to serve the project?

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_  
\_\_\_\_\_

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  Yes  No

If Yes:

- Applicant/sponsor for new district: \_\_\_\_\_
- Date application submitted or anticipated: \_\_\_\_\_
- What is the receiving water for the wastewater discharge? \_\_\_\_\_

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):  
\_\_\_\_\_  
\_\_\_\_\_

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: \_\_\_\_\_  
\_\_\_\_\_

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?  Yes  No

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

960 Square feet or 0.02 acres (impervious surface)

    \_\_\_\_\_ Square feet or 107.2 acres (parcel size)

ii. Describe types of new point sources. NONE

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Infiltration to groundwater

- If to surface waters, identify receiving water bodies or wetlands: \_\_\_\_\_  
N/A

- Will stormwater runoff flow to adjacent properties?  Yes  No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?  Yes  No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?  Yes  No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?  Yes  No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)  Yes  No

ii. In addition to emissions as calculated in the application, the project will generate:

- \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)
- \_\_\_\_\_ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)
- \_\_\_\_\_ Tons/year (short tons) of Perfluorocarbons (PFCs)
- \_\_\_\_\_ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)
- \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
- \_\_\_\_\_ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?

Yes  No  
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If Yes:

- i. Estimate methane generation in tons/year (metric): \_\_\_\_\_
- ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): \_\_\_\_\_

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?  Yes  No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

\_\_\_\_\_

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?  Yes  No

If Yes:

- i. When is the peak traffic expected (Check all that apply):  Morning  Evening  Weekend  
 Randomly between hours of \_\_\_\_\_ to \_\_\_\_\_.
- ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): \_\_\_\_\_

iii. Parking spaces: Existing \_\_\_\_\_ Proposed \_\_\_\_\_ Net increase/decrease \_\_\_\_\_

iv. Does the proposed action include any shared use parking?  Yes  No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

\_\_\_\_\_

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site?  Yes  No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?  Yes  No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes?  Yes  No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?  Yes  No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: \_\_\_\_\_

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

\_\_\_\_\_

iii. Will the proposed action require a new, or an upgrade, to an existing substation?  Yes  No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: \_\_\_\_\_ 7AM-6PM \_\_\_\_\_
- Saturday: \_\_\_\_\_ 7AM-6PM \_\_\_\_\_
- Sunday: \_\_\_\_\_
- Holidays: \_\_\_\_\_

ii. During Operations:

- Monday - Friday: \_\_\_\_\_ 24/7 PASSIVE OPERATION \_\_\_\_\_
- Saturday: \_\_\_\_\_ 24/7 PASSIVE OPERATION \_\_\_\_\_
- Sunday: \_\_\_\_\_ 24/7 PASSIVE OPERATION \_\_\_\_\_
- Holidays: \_\_\_\_\_ 24/7 PASSIVE OPERATION \_\_\_\_\_

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?

Yes  No

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If yes:

i. Provide details including sources, time of day and duration:

Temporary construction noise associated with land clearing, site preparation, and solar panel installation. Typical construction noise includes operation of power equipment and vehicles and will occur during daylight construction hours. Operational noise includes transformers, inverters, and SAT motors.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?

Yes  No

Describe: \_\_\_\_\_

n. Will the proposed action have outdoor lighting?

Yes  No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

\_\_\_\_\_

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?

Yes  No

Describe: \_\_\_\_\_

o. Does the proposed action have the potential to produce odors for more than one hour per day?

Yes  No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: \_\_\_\_\_

\_\_\_\_\_

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?

Yes  No

If Yes:

i. Product(s) to be stored \_\_\_\_\_

ii. Volume(s) \_\_\_\_\_ per unit time \_\_\_\_\_ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: \_\_\_\_\_

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?

Yes  No

If Yes:

i. Describe proposed treatment(s):

\_\_\_\_\_

\_\_\_\_\_

ii. Will the proposed action use Integrated Pest Management Practices?

Yes  No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?

Yes  No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

• Construction: \_\_\_\_\_ 50 tons per \_\_\_\_\_ construction period (unit of time)

• Operation : \_\_\_\_\_ tons per \_\_\_\_\_ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

• Construction: The majority of solid waste will be pallets and cardboard for solar panel delivery. Other waste includes general trash, seed bags, conduit cutting, and universal waste.

• Operation: N/A

iii. Proposed disposal methods/facilities for solid waste generated on-site:

• Construction: Permitted landfill, recycling facility.

• Operation: N/A

s. Does the proposed action include construction or modification of a solid waste management facility?  Yes  No

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If Yes:

- i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfills, or other disposal activities): \_\_\_\_\_
- ii. Anticipated rate of disposal/processing:
  - \_\_\_\_\_ Tons/month, if transfer or other non-combustion/thermal treatment, or
  - \_\_\_\_\_ Tons/hour, if combustion or thermal treatment
- iii. If landfill, anticipated site life: \_\_\_\_\_ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste?  Yes  No

If Yes:

- i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: \_\_\_\_\_
- ii. Generally describe processes or activities involving hazardous wastes or constituents: \_\_\_\_\_
- iii. Specify amount to be handled or generated \_\_\_\_\_ tons/month
- iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: \_\_\_\_\_
- v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?  Yes  No

If Yes: provide name and location of facility: \_\_\_\_\_

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: \_\_\_\_\_

**E. Site and Setting of Proposed Action**

**E.1. Land uses on and surrounding the project site**

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

- Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)
- Forest  Agriculture  Aquatic  Other (specify): \_\_\_\_\_

ii. If mix of uses, generally describe:

The site is a cultivated agricultural field surround by rural residences, a solar farm, fields and woods, and utility lines.

b. Land uses and coverytypes on the project site.

Land use or Coverytype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.0	0.0	0.0
• Forested	0.0	0.0	0.0
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.0	0.0	0.0
• Agricultural (includes active orchards, field, greenhouse etc.)	+/- 22.04	0.0	-22.04
• Surface water features (lakes, ponds, streams, rivers, etc.)	0.0	0.0	0.0
• Wetlands (freshwater or tidal)	0.0	0.0	0.0
• Non-vegetated (bare rock, earth or fill)	+/- 0.46	0.0	-0.46
• Other Describe: Solar array (within fenceline) and pervious gravel access road. Screening tree areas.	0.0	+/- 22.5	+22.5



c. Is the project site presently used by members of the community for public recreation?

Yes  No

Section 3, Item d.

i. If Yes: explain:

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?

Yes  No

If Yes,

i. Identify Facilities:

\_\_\_\_\_

\_\_\_\_\_

e. Does the project site contain an existing dam?

Yes  No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: \_\_\_\_\_ feet
- Dam length: \_\_\_\_\_ feet
- Surface area: \_\_\_\_\_ acres
- Volume impounded: \_\_\_\_\_ gallons OR acre-feet

ii. Dam's existing hazard classification: \_\_\_\_\_

iii. Provide date and summarize results of last inspection: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?

Yes  No

If Yes:

i. Has the facility been formally closed?

Yes  No

- If yes, cite sources/documentation: \_\_\_\_\_

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

\_\_\_\_\_

\_\_\_\_\_

iii. Describe any development constraints due to the prior solid waste activities: \_\_\_\_\_

\_\_\_\_\_

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?

Yes  No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

\_\_\_\_\_

\_\_\_\_\_

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?

Yes  No

If Yes:

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:

Yes  No

Yes – Spills Incidents database Provide DEC ID number(s): \_\_\_\_\_

Yes – Environmental Site Remediation database Provide DEC ID number(s): \_\_\_\_\_

Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures: \_\_\_\_\_

\_\_\_\_\_

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?

Yes  No

If yes, provide DEC ID number(s): \_\_\_\_\_

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

\_\_\_\_\_

\_\_\_\_\_

v. Is the project site subject to an institutional control limiting property uses?  Yes  No

- If yes, DEC site ID number: \_\_\_\_\_
- Describe the type of institutional control (e.g., deed restriction or easement): \_\_\_\_\_
- Describe any use limitations: \_\_\_\_\_
- Describe any engineering controls: \_\_\_\_\_
- Will the project affect the institutional or engineering controls in place?  Yes  No
- Explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**E.2. Natural Resources On or Near Project Site**

a. What is the average depth to bedrock on the project site? \_\_\_\_\_ TBD > 5 feet

b. Are there bedrock outcroppings on the project site?  Yes  No  
 If Yes, what proportion of the site is comprised of bedrock outcroppings? \_\_\_\_\_ %

c. Predominant soil type(s) present on project site:

Honeoye gravelly silt loam (HmB/C)	90 %
Lima silt loam (LmB)	10 %

d. What is the average depth to the water table on the project site? Average: \_\_\_\_\_ TBD > 3 feet

e. Drainage status of project site soils:

<input checked="" type="checkbox"/> Well Drained:	90 % of site
<input checked="" type="checkbox"/> Moderately Well Drained:	10 % of site
<input type="checkbox"/> Poorly Drained	_____ % of site

f. Approximate proportion of proposed action site with slopes:

<input checked="" type="checkbox"/> 0-10%:	100 % of site
<input type="checkbox"/> 10-15%:	0 % of site
<input type="checkbox"/> 15% or greater:	0 % of site

g. Are there any unique geologic features on the project site?  Yes  No  
 If Yes, describe: \_\_\_\_\_  
 \_\_\_\_\_

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?  Yes  No

ii. Do any wetlands or other waterbodies adjoin the project site?  Yes  No  
ON PARCEL NOT IN PROJECT AREA

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?  Yes  No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name N/A Classification \_\_\_\_\_
- Lakes or Ponds: Name N/A Classification \_\_\_\_\_
- Wetlands: Name Federal Waters ON PARCEL NOT IN PROJECT AREA Approximate Size 1.96
- Wetland No. (if regulated by DEC) \_\_\_\_\_

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?  Yes  No  
 If yes, name of impaired water body/bodies and basis for listing as impaired: \_\_\_\_\_  
 \_\_\_\_\_

i. Is the project site in a designated Floodway?  Yes  No

j. Is the project site in the 100-year Floodplain?  Yes  No

k. Is the project site in the 500-year Floodplain?  Yes  No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?  Yes  No  
 If Yes:  
 i. Name of aquifer: \_\_\_\_\_

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Deer _____</td> <td style="border: none;">Small Mammals _____</td> </tr> <tr> <td style="border: none;">Wild Turkey _____</td> <td style="border: none;">Coyotes _____</td> </tr> <tr> <td style="border: none;">Common Bird Species _____</td> <td style="border: none;">Fox _____</td> </tr> </table>	Deer _____	Small Mammals _____	Wild Turkey _____	Coyotes _____	Common Bird Species _____	Fox _____	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Section 3, Item d.</div>
Deer _____	Small Mammals _____						
Wild Turkey _____	Coyotes _____						
Common Bird Species _____	Fox _____						
<p>n. Does the project site contain a designated significant natural community? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> <li>• Currently: _____ acres</li> <li>• Following completion of project as proposed: _____ acres</li> <li>• Gain or loss (indicate + or -): _____ acres</li> </ul>							
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): <span style="border: 1px solid blue; padding: 2px; display: inline-block;">SEE ATTACHED T&amp;E SPECIES INFO.</span></p> <p>The USFWS lists Northern Long-eared Bat (NLEB) at the project site. The NYSDEC does not list any T&amp;E species at the site. No tree clearing is proposed at the site and work will not affect NLEB or their habitat.</p>							
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p>							
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p>							
<p><b>E.3. Designated Public Resources On or Near Project Site</b></p>							
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes, provide county plus district name/number: TOMP001</p>							
<p>b. Are agricultural lands consisting of highly productive soils present? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? +/- 22.5 (entire site listed as prime farmland or farmland of statewide importance). _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): USDA _____</p>							
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p>							
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>							

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commission Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?  Yes  No

If Yes:

i. Nature of historic/archaeological resource:  Archaeological Site  Historic Building or District

ii. Name: \_\_\_\_\_

iii. Brief description of attributes on which listing is based: \_\_\_\_\_

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?  Yes  No

g. Have additional archaeological or historic site(s) or resources been identified on the project site?  Yes  No

If Yes:

i. Describe possible resource(s): SHPO REVIEW IN PROCESS

ii. Basis for identification: \_\_\_\_\_

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?  Yes  No

If Yes:

i. Identify resource: Cayuga Lake Scenic By-way; Views listed within the Tompkins Co. Scenic Resources Inventory

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Scenic By-way; Distinctive and Noteworthy Views listed in the County inventory.

iii. Distance between project and resource: \_\_\_\_\_ within 5 miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?  Yes  No

If Yes:

i. Identify the name of the river and its designation: \_\_\_\_\_

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?  Yes  No

**F. Additional Information**

Attach any additional information which may be needed to clarify your project.

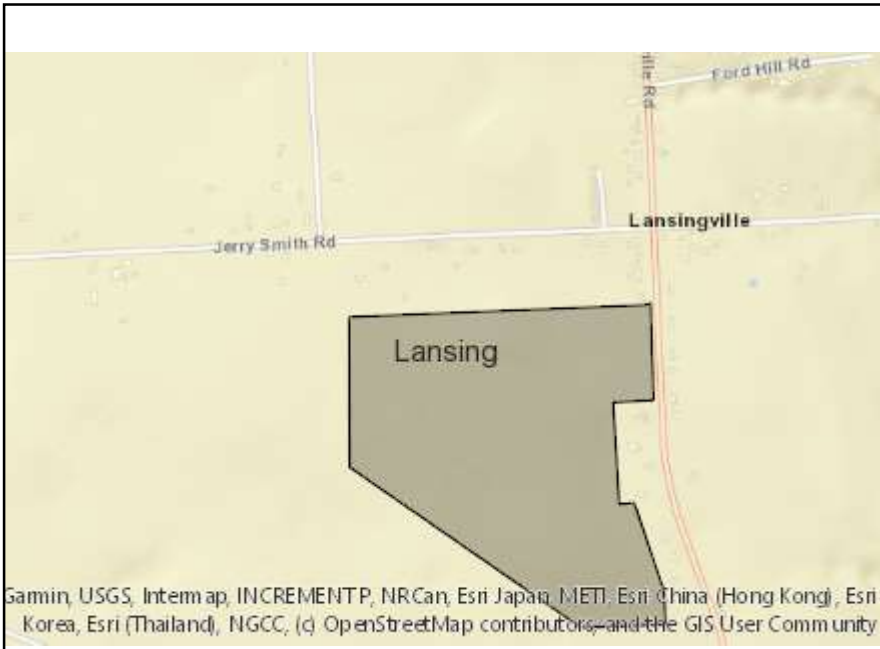
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

**G. Verification**

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Chris Koenig (C.T. Male Associates) Date 3/24/2023

Signature  Title Project Manager



**Disclaimer:** The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	No

E.2.n. [Natural Communities]	No	
E.2.o. [Endangered or Threatened Species]	No	Section 3, Item d.
E.2.p. [Rare Plants or Animals]	No	
E.3.a. [Agricultural District]	Yes	
E.3.a. [Agricultural District]	TOMP001	
E.3.c. [National Natural Landmark]	No	
E.3.d [Critical Environmental Area]	No	
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.	
E.3.f. [Archeological Sites]	Yes	
E.3.i. [Designated River Corridor]	No	

# PART 1 EAF ATTACHMENTS



## 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](mailto: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 Fisheries<sup>1</sup>, 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: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Insects

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



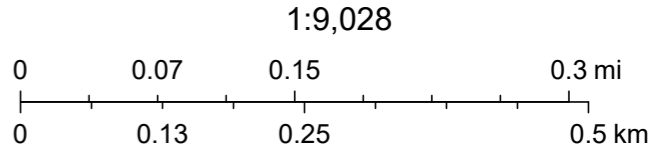
# 528 Lansingville Road, Lansing, NY



October 17, 2022

**LEGEND**

- Subject Property
- Tax Parcels
- Rare Plants and Animals (None in mapped area)
- Significant Natural Communities (None in mapped area)



NYS ITS GIS Program Office, Westchester County GIS , Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



**LETTER OF INTENT**

**LEASE AND SUBDIVISION OF PROPERTY**

**April 20, 2021**

The purpose of this Letter of Intent (this “**LOI**”) is to describe the key terms of a possible transaction involving (i) the property owned by Turek Farms, LLC, a New York limited liability company (“**Lessor**”), located at 528 Lansingville Rd. Lansing, NY with the tax map number of 16-1-19.2 and consisting of twenty (20) acres to Genie Solar Energy, LLC, a Delaware limited liability company, or one or more of its affiliates thereof (“**Lessee**”), for the purposes of developing and operating solar farms to generate energy for sale and subscription to consumers (“**Projects**”). Each of Lessee and Lessor shall be a “**Party**”, and collectively the “**Parties**”.

This LOI is intended solely as a non-binding summary of the terms that are currently proposed by the Parties, except for the paragraphs entitled “*Exclusivity/Confidentiality*”, “*Due Diligence*” and “*Governing Law*”, which shall be fully binding by the terms thereof. The proposed ideas regarding structure and investment are not intended to be, and shall not constitute, a complete and exhaustive description of any agreement, arrangement or understanding between the parties nor shall they impose any obligation to negotiate in any prescribed manner under the laws of any jurisdiction. A binding agreement will not occur unless and until all necessary approvals have been obtained and the Parties have negotiated, approved, executed and delivered the appropriate definitive agreements.

**Exclusivity/Confidentiality**

From the date of this LOI referenced above (“**Effective Date**”) through the period ending six (6) months thereafter (the “**Exclusivity Period**”), neither the Lessor, its affiliates, nor any of their respective principals, owners, directors, officers, employees, agents or representatives (“**Lessor Representatives**”) will solicit or participate in the negotiations or discussions with any person or entity other than Lessee with respect to the rental, lease, subdivision, sale, mortgage, or any other transaction affecting or involving the disposition, encumbrance, grant or change of/in any title, ownership, or interest in the Property. The Lessor will provide prompt notice to Lessee of any written communications received regarding any such transaction or interest in such a proposed transaction. During the Exclusivity Period, Lessor nor any Lessor Representative will take any action that could frustrate the exclusivity provisions set forth above. Notwithstanding the expiration of the Exclusivity Period as set forth above, where the Parties continue to negotiate in good faith, the Exclusivity Period may be extended for additional time to provide for the drafting of definitive agreements or to obtain approvals as set forth in the Closing Section below.

Reference is made to the Non-Disclosure Agreement executed between the Parties concurrent hereto and attached hereto as **Exhibit B** and incorporated herein (“**NDA**”). The terms and conditions described in this LOI including its existence shall be regarded as “**Confidential Information**” under the NDA between the Parties and subject to the confidentiality restrictions and provisions contained therein.



**Offering Terms**

*Closing Date:*

The closing contemplated for this transaction (the "**Closing**") shall occur as soon as practicable following (i) Lessee's decision to proceed following its completion of diligence regarding the property, regulatory environment and requirements, and assessed viability of the utility's infrastructure and ability to interconnect with the proposed solar farm, (ii) receipt of written approval (a) by the utility to interconnect to the New York State Electric & Gas (b) by the New York to proceed with the Project and issue rebates and tax incentive credits in accordance with the State of New York Solar REC and tax incentive Program, and (c) as required by the Township of Lansing and County of Tompkins or subdivision thereof, for the subdivision of the Property, the Leases (as defined below), and the construction and operation of the Project, and (iii) the finalization of definitive agreements to the mutual satisfaction of the Parties (collectively, with items i – ii, the "**Closing Conditions**"), but shall not extend beyond the Exclusivity Period; **provided, however**, that if the Parties are involved in good faith negotiations and have made good progress towards finalizing the diligence and the drafting of definitive documents, the Closing date together with the Exclusivity Period shall be automatically extended by an additional thirty (30) days to allow for the satisfaction of the Closing Condition, or longer if by mutual agreement of the Parties in writing. If the Closing shall not have occurred in accordance with the foregoing, this LOI shall automatically terminate, and the transaction contemplated herein, and the Parties' obligations with respect thereto, other than those that expressly survive termination as provided herein, shall cease without liability, except for breaches of confidentiality, exclusivity and due diligence.

*Proposed Leases and Subdivision*

Upon Closing, Lessor would lease the Property in accordance with the Lessee's plan ("**Leases**") to the Lessee, which shall, in the aggregate, constitute 20 acres of the Property, for a term of thirty (30) years ("**Term**") with the option, at the sole discretion but without obligation of the Lessee, to extend the Term for an additional five (5) years thereafter, followed by an additional option, at the sole discretion but without obligation of the Lessee, to extend the Term for another five (5) years. In consideration for the Leases, the Lessee

shall pay [REDACTED]

*Definitive Agreements:*

The Parties shall work together to develop mutually acceptable definitive agreement(s) governing the proposed transaction based on the preliminary framework set forth herein. The definitive agreements shall include customary and standard provisions within the industry for transactions of this kind, including, without limitation, covenants, representations, warranties and conditions for Closing.

*Due Diligence:*

The Seller shall cooperate with Lessee's reasonable due diligence investigation concerning the Property and surrounding electrical and utility infrastructure and interconnectivity, and shall grant the Lessee, its affiliates, representatives, and personnel from the utilities and the government agencies or subdivisions invited on premises by the Lessee with reasonable access to the Property during normal business hours, and provide Lessee and its Lessee Representatives with prompt and full access to key books and records concerning the Property.

*Governing Law:*

This LOI is governed by the laws of New York, without regard to conflicts or choice of law. Any disputes hereunder shall be adjudicated in the State of New York.

*Expenses:*

Each Party will pay its own expenses incurred in connection with the contemplated transaction, including, without limitation, all expenses incident to the negotiation, preparation and performance of this LOI and the definitive agreements.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties hereto have executed this LOI as of the date and year first written above.

Agreed to:

**“LESSEE”**

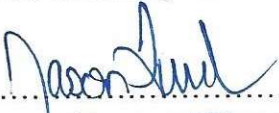
**GENIE SOLAR ENERGY, LLC**

By.....  
Name..... Michael Stein  
Title..... CEO

Agreed to:

**“LESSOR”**

**TUREK FARMS, LLC**

By.....  
Name..... JASON TUREK  
Title..... Partner

**EXHIBIT A: NDA**



**EXHIBIT B: PROPERTY DESCRIPTION**

Detailed Layout







**C.T. MALE ASSOCIATES**

Engineering, Surveying, Architecture, Landscape Architecture &amp; Geology, D.P.C.

50 Century Hill Drive, Latham, NY 12110  
518.786.7400 FAX 518.786.7299 www.ctmale.com

March 23, 2023

Nathan Knapke  
Genie Solar Energy  
520 Broad Street  
Newark, NJ 07102  
Email: [nknapke@geniesolarenergy.com](mailto:nknapke@geniesolarenergy.com)

Re: *Visibility Analysis*  
*Lansing Community Solar Project, Lansingville Road*  
*Town of Lansing, Tompkins County, New York*  
*C.T. Male Project No. 22.2303*

Dear Nathan:

C.T. Male Associates, Engineering, Surveying, Architecture, Landscape Architecture, and Geology D.P.C. (C.T. Male) has completed a Visibility Analysis for the Lansing Community Solar Project that is proposed off Lansingville Road in the Town of Lansing. This work was completed to assess potential visual impacts related to the project, in accordance with Town of Lansing Local Law #3 of 2020 (Solar Law).

**Compliance with the Solar Law**

§ 802.18 (Solar Energy Facility Special Conditions, including for Site Plan Review)

**§ 802.18.6 (Visual Effect):** *“The Solar Energy Facility must have the least visual effect reasonably practicable on the environment, as determined by the Planning Board. The determination must be based on site specific conditions including topography, adjacent structures, and roadways. Solar Energy Facilities must avoid clearing extensive areas of forest, and practicable efforts must be made to minimize visual impacts by preserving natural vegetation and providing dense evergreen landscape screening to abutting residential properties and roads, yet screening should minimize the shading on solar collectors.”*

The proposed project meets this requirement. The project is sited in way that utilizes setbacks, existing vegetation, topography, and a dense planted vegetative screen (290± trees) to mitigate visual impacts and blend the project with the existing landscape. Several areas of potential project visibility were identified around the site during initial site planning. However, after analyzing the terrain during project layout, along with providing dense vegetative screen, the potential visibility of the project has been minimized and represents the least visual effect on the environment that is reasonably practicable. More detail on specific viewsheds is provided below:

Visibility Analysis  
Lansing Community Solar Project  
Lansingville Road  
Page - 2

## Viewsheds

- **View from Lansingville Road (Profile 1)**: From Lansingville Road the site slopes up to the west. The existing view up this rise is mostly unobstructed as it is a cultivated agricultural field essentially to the bounds of the parcel. The solar array is sited mostly on the top of this rise in the northwest corner of the project site, and will be partially obstructed by the intervening topography in the form of a small ridge. To supplement the intervening topography, two (2) dense vegetative screens are proposed. One consists of a single-row of evergreen trees (a three-species mix) planted 10-feet on-center along the eastern boundary of the parcel along the public roadway. This screen will be planted along the parcel's entire road frontage, except for where the existing driveway entrance will be maintained. The other vegetative screen will be a double row of the three-species evergreen mix along the project fence line, planted 10-feet on-center in a staggered pattern. This double row will be planted outside the fence line, which will be an 8-foot tall agricultural-style woven-wire deer fence with timber posts. The proposed vegetative screen will grow at a rate of approximately one foot per year. In addition, the project fence line is set back 1,150± feet from the center line of Lansingville Road, which is a substantial setback of 0.22± miles.

The location of this viewshed is represented by Profile 1, which is mapped on the attached Sheet C-801. The Profile 1 line-of-sight diagram and the existing conditions viewshed photograph are depicted on the attached Sheet C-802.

**Impact Discussion:** It is likely that the eastern edge of the array and fenceline will be visible in year one on the east facing slope. The views will be limited to portions of the project that will "peek" over the screening trees such as the top of the perimeter fence and the tops of the solar panels at their full tilt and height. However, as the vegetative screen grows, the views of the project should be substantially screened by year 5 or 6, and fully screened by year 10. In addition, the provision of a 1,150± foot setback from the road will reduce the magnitude of partial visibility, and the screening trees at planting will soften the visibility and blend the project with the natural environment. Based on the above, the limited initial visibility of the project from Lansingville Road does not infer a significant environmental impact.

- **Views from Rear Yards of 361 and 383 Jerry Smith Road (Profiles 2 & 3)**: Between the rear yards of these residential properties and the proposed solar array, the topography is relatively flat. There exists a vegetative buffer around portions of the rear yards that is approximately 25 feet wide and is fully off the project site, which partially screens the view of the site currently. To mitigate the view from these properties, two (2) dense vegetative screens are proposed, which will be double rows

*Visibility Analysis  
Lansing Community Solar Project  
Lansingville Road  
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of the three-species evergreen mix along the project fence line and along the property boundary, planted 10-feet on-center in a staggered pattern. In addition, a 100-foot minimum setback from the property boundary to the screened fence line is proposed. The setback to 361 Jerry Smith Road is 350± feet and the setback to 383 Jerry Smith Road is 150± feet.

The location of this viewshed is represented by Profiles 1 and 2, which are mapped on the attached Sheet C-801. The Profile 1 and 2 line-of-sight diagrams and the existing conditions viewshed photographs are depicted on the attached Sheet C-802.

- **Impact Discussion:** The view of the project from these adjoining residences will be substantially mitigated by existing off-site vegetative buffers as well as two (2) proposed intervening dense evergreen vegetative screens. Based on the flat topography in this area, the view of the array should be substantially screened and blended with the existing environment upon planting and fully screened by year 3. Based on the above, this limited visibility does not infer a significant environmental impact, and the provision of dense evergreen screens minimize the impact.

### **Other Visual Considerations**

- **Other Residences:** Other residential properties nearby the site along Jerry Smith Road, Lansingville Road, and Dublin Road are not expected to have any significant visibility of the project due primarily to existing treelines that are not planned for removal, intervening topography, and setback/distance to the array.
- **Utility Poles:** A series of seven (7) utility poles will be located near the site entrance and set back off Lansingville Road approximately 225 feet. The utility poles will be standard timber, 40-foot poles that will house the interconnection equipment, some of which will be owned by NYSEG. The poles will be set behind the existing overhead line that runs north-south through this area of the site and will connect into this line. The remainder of the electrical lines within the array and up to the poles will be underground. The utility pole series associated with the utility interconnection is an unavoidable component of the project. However, the poles are of similar visual character to the existing line running through this area of the property as well as along the east side of Lansingville Road.

# C.T. MALE ASSOCIATES

*Visibility Analysis  
Lansing Community Solar Project  
Lansingville Road  
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- **Officially Designed Federal, State, or Local Scenic or Aesthetic Resources:** The proposed project will not be visible from any designed scenic or aesthetic resources, including those listed as “distinctive” and “noteworthy” in the Tompkins County Scenic Resources Inventory (2007) or the compendium Tompkins County Protecting Our Scenic Resources Guide (2010). In addition, the project will not be visible from the Cayuga Lake Scenic Byway, which is NY-34B on the east side of Cayuga Lake, and NY-89 on the west side of Cayuga Lake.

## Summary

Based on the project siting, as well as the preservation of existing vegetation around the property, and the provision of dense evergreen vegetative screens, the project will have the least visual impact on the environment that is reasonably practicable and is in compliance with the solar law as it pertains to visual effect. Furthermore, the limited visibility of the array from Lansingville Road upon construction prior to the full development of the vegetative screen and the visibility of the interconnection utility poles does not represent a significant adverse impact on the environment and will not affect any designated scenic or aesthetic resources in the Town of Lansing or Tompkins County.

Respectfully Submitted,

C.T. MALE ASSOCIATES



Chris Koenig  
Project Manager

Attachment: Line-of-Sight Profiles (1-3)





**PRELIMINARY**

**1 PLAN**  
 C-801  
 SCALE: 1" = 100'  
 CROSS REFERENCE: NONE

BAR SCALE  
 0 50 100 200  
 1 inch = 100 ft.

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

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 C.T. MALE ASSOCIATES

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

**VIEW SHED EXHIBIT - PLAN VIEW**

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

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**  
 Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.  
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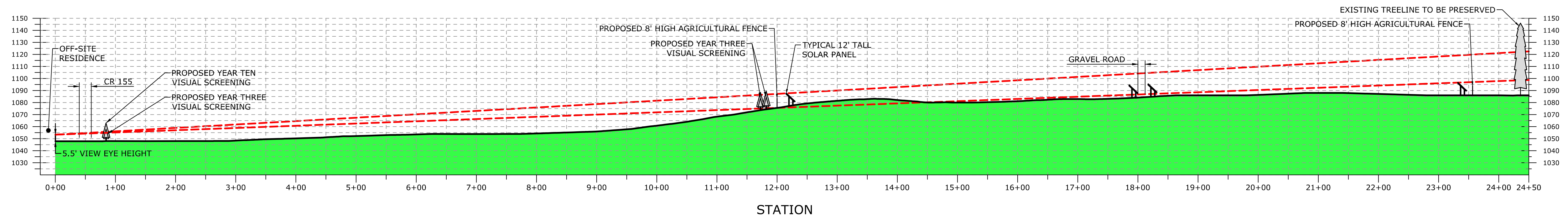
**C-801**  
 SHEET 15 OF 16  
 DWG. NO: 23-015

CAD DWG. FILE NAME: K:\Projects\222303\Civil\00\_Drawings and Maps\C-801.dwg





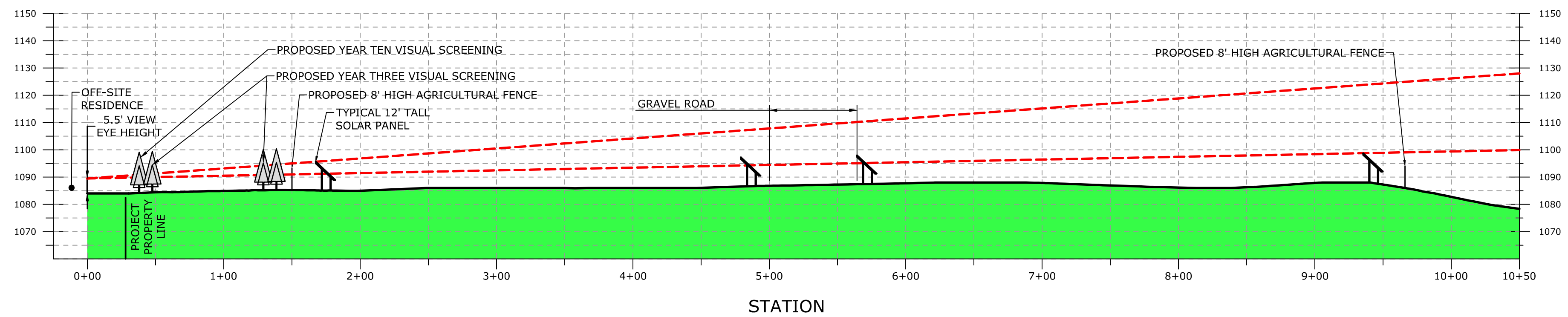
EXISTING PROFILE VIEW 1 FACING WEST



**1 PROFILE VIEW 1**  
 SCALE: HORZ. 1" = 100'  
 VERT. 1" = 50'  
 CROSS REFERENCE: 1/C-801



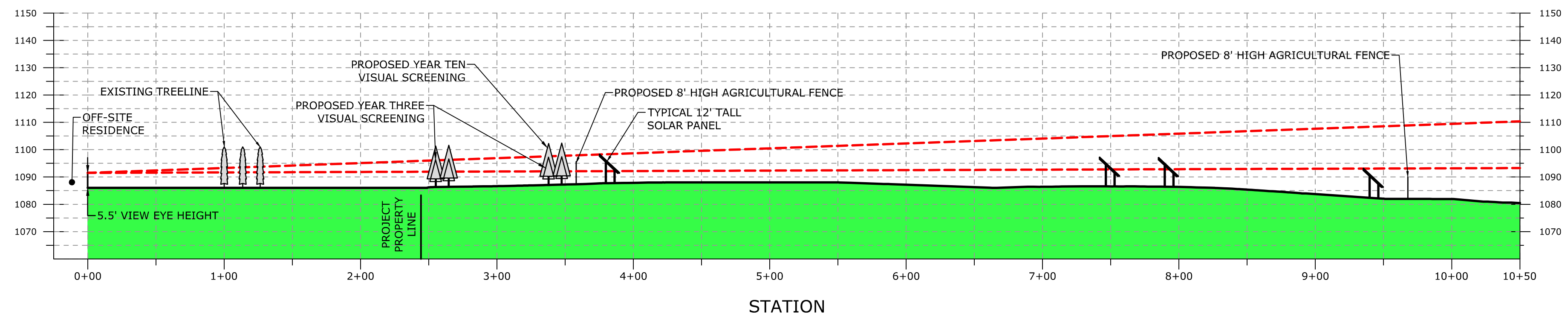
EXISTING PROFILE VIEW 2 FACING SOUTHEAST



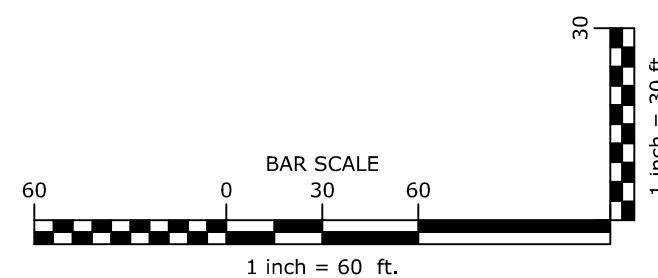
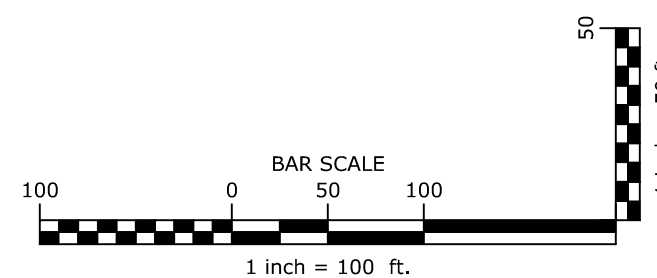
**2 PROFILE VIEW 2**  
 SCALE: HORZ. 1" = 60'  
 VERT. 1" = 30'  
 CROSS REFERENCE: 1/C-801



EXISTING PROFILE VIEW 3 FACING SOUTHEAST



**3 PROFILE VIEW 3**  
 SCALE: HORZ. 1" = 60'  
 VERT. 1" = 30'  
 CROSS REFERENCE: 1/C-801



**PRELIMINARY**

**VIEW SHED EXHIBIT - PROFILE VIEW**

**LANSING COMMUNITY SOLAR, LLC**  
**GENIE SOLAR ENERGY**  
 TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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 JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY  
 www.ctmale.com

**C-802**  
 SHEET 16 OF 14  
 DWG. NO: 23-015

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

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

CAD DWG. FILE NAME: K:\Projects\222303\Civil\00\_Drawings and Maps\C-802.dwg





**528 Lansingville Road  
Wetland Delineation Map**

Town of Lansing      Tompkins County, NY

**C.T. MALE ASSOCIATES**  
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518.786.7400 \* FAX 518.786.7299

Project Number: 22.2303  
Data Source: NYS GIS Clearinghouse  
Projection: State Plane NAD83 NYE (Feet)  
Date: October 24, 2022  
File: Lansing\_WTLD Delin\_11x17.mxd  
GIS: J Spain

**Map Notes:**  
(1) 2018 Ortho Imagery from the GIS Clearinghouse  
WMS Ortho Server.


**Legend**

- Subject Property
- Delineated Wetlands
- Offsite Wetland Boundary
- Wetland Flag Point
- ▲ Wetland Data Plot
- ➔ Wetland Contd. Offsite
- ➔ Water Flow Direction
- ◆ Bat Habitat Data Plot
- ⋯ Offsite Wetland Boundary
- Drainage Ditch
- Culvert Pipe
- 1 Photo Location

**Note:** A delineation of wetlands and waterbodies was performed by C.T. Male staff on October 18-19, 2022 in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional supplement, and the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Wetland flags were surveyed using a Trimble GEO-7X GPS unit.

NYS ITS GIS Program Office, Westchester County GIS



	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
	<b>Distributed Energy Resources - NYSSIR</b>	Revision 0 11/18/2022

**For**

**Interconnection Customer: Lansing Community Solar, LLC**

**Applicant: Genie Solar Energy**

**5000 kVA PV Generator System**

**528 Lansingville Rd**

**Interconnection to NYSEG**

**Ithaca Division**


**4303101 Tap Circuit**

**34.5kV Feeder**

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	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
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	<b>Coordinated Electric System Interconnect Review</b>	<b>DER #19658</b>
	<b>Distributed Energy Resources - NYSSIR</b>	Revision 0 11/18/2022

### 1.0 INTRODUCTION

This report presents the analysis results of the NYSEG interconnection study based on the proposed interconnection and design submittal from the Interconnection Customer in accordance with the Company Bulletin 86-01. The intent of this report is to assess this project’s feasibility, determine its impact to the existing electric power system (EPS), determine interconnection scope and installation requirements, and determine costs associated with interconnecting the Interconnection Customer’s generation to the Company’s Electric Power System (EPS). This Coordinated Electric System Impact Review (CESIR) study; according to the New York State Standardized Interconnection Requirements (NYSSIR) Section I.C Step 6; identifies the scope, schedule, and costs specific to this Interconnection Customer’s installation requirements.

### 2.0 EXECUTIVE SUMMARY


The total estimated planning grade cost of the work associated with the interconnection of the Interconnection Customer is REDACTED PROPRIETARY FINANCIAL INFORMATION

The interconnection was found to be feasible by distribution planning with modifications to the existing Company EPS and operating conditions, which are described in detail in the body of this Study.

Transmission Planning does not have any concerns with the installation of this proposed generation at this location.

The ability to generate is contingent on this facility being served by the interconnecting circuit during normal Utility operating conditions. Therefore, if the interconnecting circuit is out of service, or if abnormal Utility operating conditions of the area EPS are in effect, NYSEG reserves the right to disengage the facility.

No future increase in generation output beyond that which specified herein for this interconnection has been studied. Any increase in system size and/or design change is subject to a new study and costs associated shall be borne by the Interconnection Customer. An increase in system size may also forfeit the Interconnection Customer’s existing queue position.

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**3.0 COMPANY EPS PARAMETERS**


Substation	N. Lansing
Transformer Name	N/A
Transformer Peak Load (kVA)	N/A
Contingency Condition Load, N-1 Criteria (kVA)	N/A
Minimum Daytime Load (kVA)	N/A
Generation: Total/Connected/Queued (kVA)	5358 / 5358 / 0
Contingency Condition Generation: T/C/Q (kVA)	N/A
Supply Voltage (kV)	34.5
Transformer Maximum Nameplate Rating (kVA)	N/A
Distribution Bus Voltage Regulation	Yes
Transmission GFOV Status	N/A
Bus Tie	none
Number of Feeders Served from this Bus	N/A
Connecting Feeder/Line	4303101
Peak Load on Feeder (kVA)	3,590
Minimum Daytime Load on Feeder (kVA)	339
Feeder Primary Voltage at POI (kV)	34.50
Line Phasing at POI	Three-Phase
Circuit distance from POI to substation	1.335 miles
Distance to nearest 3-Phase (if applicable)	N/A
Line Regulation	Yes
Line/Source Grounding Configuration at POI	Effective
Other Generation: Total/Connected/Queued (kVA)	5358 / 5358 / 0
System Fault Characteristics without Interconnection Customer DG at POI with System Upgrades described in Section 6	
Interconnection Customer POI Location	L-533, P-195
I 3-Phase (3LLL)	3584 Amps
I Line to Ground (3I0)	2504 Amps
Z1 (100 MVA Base)	0.1176 + j0.4648 PU
Z0 (100 MVA Base)	0.3013 + j1.0239 PU

**4.0 INTERCONNECTION CUSTOMER SITE**

The Interconnection Customer is proposing a new Primary Metered Service connection.


This location is presently served via Three-Phase 34.5kV.

The proposed generating system consists of :


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**5.0 SYSTEM IMPACT ANALYSIS**

Category	Criteria	Limit	Result
Voltage	Overvoltage	<105% (ANSI C84.1)	PASS
With the addition of the subject generator, the maximum voltage as modeled on the Feeder is 105.83% of nominal, and is not impacted by the proposed DER. No remediation is required.			
Voltage	Undervoltage	>95% (ANSI C84.1)	PASS
With the addition of the subject generator, the minimum voltage as modeled on the Feeder is 91.36% of nominal, and is not impacted by the proposed DER. No remediation is required.			
Voltage	Source Regulation for Reverse Power	<9.4% minimum load criteria	FAIL
The total generation downstream of the source regulation is 10.358MVA. The total minimum load on this source is 0.339MVA. Therefore, the generation to load ratio is 3055%.			
Voltage	Line Regulation for Reverse Power	Minimum load to generation criteria	N/A
Not Applicable			
Voltage	Fluctuation	<3% steady state from proposed generation on feeder	PASS
The greatest steady-state voltage fluctuation on the circuit is 0.22% due to the proposed generation and 0.01% on the substation bus due to the aggregate generation.			
Voltage	Fluctuation	<5% steady state from aggregate DER on substation bus	PASS
The greatest steady-state voltage fluctuation on the substation bus due to aggregate generation is 0.01%.			
Voltage	Regulator Variation	Regulator tap movement >1 position	PASS
The greatest voltage fluctuation seen at the voltage regulation at the source is 0.02V.			
Voltage	Flicker	Screen H Flicker	PASS
With an X/R ratio of 3.95, the Pst for the location with the greatest voltage fluctuation is 0.022 and the emissions limit is 0.350.			
Voltage	Flicker	Aggregate Flicker	PASS
The Pst for the location with the greatest aggregate voltage fluctuation is 0.022 and the emissions limit is 0.900.			
Equipment Ratings	Thermal (Cont. Current)	Thermal limits (assuming no load)	FAIL
The proposed generation exceeds an existing equipment thermal capability. (see failed equipment chart below)			
Equipment Ratings	Withstand (Fault Current)	<90% withstand limits (Distribution Equip.)	PASS
No distribution issues.			

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Equipment Ratings	Withstand (Fault Current)	<90% withstand limits (Substation Equip.)	PASS
The additional fault current contribution from the generation does not contribute to interrupting ratings in excess of existing EPS equipment.			
Protection	Unintentional Islanding	Unintentional Islanding Document & Company Guidelines	FAIL
There is a significant risk of unintentional islanding.			
Protection	Protective Device Coordination	Company Guidelines (Dist. Line Fusing)	FAIL
There is 1 existing protective device between the Source and PCC. Distribution line Protection and Coordination must be reviewed, any changes or upgrades will be included in section 6 below.			
Protection	Protective Device Coordination	Company Guidelines (Reclosers and Breakers)	PASS
The proposed interconnection does not pose an issue with protective devices.			
Protection	Fault Sensitivity	Rated capabilities of EPS equipment	PASS
The additional fault current contribution from the generation does not contribute to interrupting ratings in excess of existing EPS equipment.			
Protection	Ground Fault Detection	Reduction of reach >100%	PASS
The Interconnection Customer has proposed a Zig-Zag Transformer with an impedance of 4 ohms and X/R ratio of 4. The Zig-Zag Transformer is within Company Guidelines. The Interconnection Customer will contribute approximately 100 A of 310 current to remote bolted line to ground faults and 100 A to faults at the PCC.			
Protection	Oversvoltage - Transmission System Fault	Company 3V0 criteria	PASS
The proposed interconnection does not pose an issue.			
Protection	Oversvoltage - Distribution System Fault	<125% voltage rise	PASS
With subject generator interconnected the modeled voltage rise on the unfaulted phases of the system is 105%			
Protection	Effective Grounding	[individual utility specifications]	FAIL
With the subject generator interconnected the modeled R0/X1 is 1.89513 PU and the X0/X1 is 7.57649 PU. See Section 6 Point10.			
SCADA	Required EMS Visibility for Generation Sources	Monitoring & Control Requirements	Needed
The 5 MVA subject generator triggers the requirement for SCADA reporting to the Utility.			

	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
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Existing Equipment Rating Analysis Table:

EQUIPMENT	VOLTAGE (kV)	LINE or GISID	POLE	PASS/FAIL
3P_REGULATOR	34.5	532	3	FAIL



	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
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**6.0 MITIGATIONS FOR SYSTEM IMPACT ANALYSIS FAILURES**

Detail below is intended to provide sufficient information and clarity to give the Interconnection Customer an understanding to the relationship of costs and scope associated with the DER interconnection and the system modifications due to the DER impact. This included any required EPS equipment upgrades. Where scope items are identified, associated labor, equipment rentals and indirect project support functions (such as engineering and project management) are intended and implied.

1. Each individual PCC location must have the ability to trip offline within 2.0 seconds for the loss of voltage on any one individual phase in order to electrically isolate the DER from the utility at the generator interconnection and must be verified at checkout.
2. The Interconnection Customer is required to comply with the utility’s voltage threshold criteria while operating the generating system. If, after interconnection, the Interconnection Customer cannot meet this requirement the Company reserves the right to disconnect the generation and install voltage regulators on the utility side of the Point Of Common Coupling at the Interconnection Customer’s expense.
3. Any potential manual or automatic switching schemes with other distribution circuits will require the customer to disconnect from the distribution circuit at the customer’s PCC.
4. Protection & coordination is based on only the system-normal circuit configuration, and is not applicable for switching scenarios and ties with other distribution circuits.
5. The requirements for Remote Crediting, or Community Distributed Generation billing are that an hourly interval MV-90 meter be installed which has remote access via a dial-up telephone circuit known as a land line. The installation of the land line is the responsibility of the customer, and the installation of the meter is the responsibility of the utility.
6. Install a new microprocessor-controlled line recloser equipped with directionality on the utility-side of the primary-metered service at the PCC.
7. Any circuit tap, substation, or distribution line regulators, and substation LTC/regulator controls must be either already equipped with or changed out to retrofitted microprocessor controls that will handle reverse power flow and co-generation functionality. These include:

**Control is REQUIRED for the Source Regulation:**

- a. Circuit 4303101 Source Line Regulator at or about L-532, P-3


8. 

<b>Failure(s) Addressed:</b>	DP: Thermal
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 Upgrade existing 3P\_200 Line regulator at or about Line-532 Pole-3 from 200 A to 418 A.
9. 


<b>Failure(s) Addressed:</b>	SPC: Unintentional Islanding
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 Due to the significant risk of unintentional islanding reclose blocking is recommended.

	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
	<b>Distributed Energy Resources - NYSSIR</b>	Revision 0 11/18/2022

10. **Failure(s) Addressed:** **SPC: Overvoltage – Distribution**

Due to the installation failing the Overvoltage-Distribution System Fault and Effective Grounding Screens the project must be revised such that if the generation site is islanded from the utility the system from the Point Of Interconnection into and through the generation equipment is maintained as effectively grounded. The interconnection is required to meet the grounding requirements as identified in AVANGRID Bulletin 86-01 section 6.2.2.2 Grounding. A PE stamped revised 3 Line will be required to be submitted to the [Distributedgenerationadmin@avangrid.com](mailto:Distributedgenerationadmin@avangrid.com) mailbox clearly identifying the revision(s) made to meet the effective grounding requirements. It is vital that the proposed interconnection maintain an effectively grounded system such that during any case of islanding (intentional or not), the circuit (and load) remains effectively grounded. Therefore, verification by the utility of the system meeting the effective grounding requirements is necessary in order to energize the generation site.

	<b>Coordinated Electric System Interconnect Review</b>	DER #19658
	<b>Distributed Energy Resources - NYSSIR</b>	Revision 0 11/18/2022

**7.0 CONCEPTUAL COST ESTIMATE**

The following items are a good faith estimate for the scope and work required to interconnect the project estimated under rates and schedules in effect at the time of this study in accordance with the most recent version of the NYSSIR.

**Planning Grade Estimate**


**Project #19658**

**Scope:**

- A . Install Interconnection PCC Recloser with SCADA & reclose blocking capabilities
- B . Install 3P\_200 Regulator at L-532 P-3 from 200 A to 418 A
- C . Primary metering installation
- D . Engineering support
- E . Project Administration

REDACTED PROPRIETARY FINANCIAL INFORMATION

**Notes to Developer:**  
Developer is required to pay all actual costs for system upgrades and interconnection facilities.

	<b>Coordinated Electric System Interconnect Review</b>	<b>DER #19658</b>
	<b>Distributed Energy Resources - NYSSIR</b>	Revision 0 11/18/2022

Notes:

- 1.) These estimated costs are based upon the results of this study and are subject to change. All costs anticipated to be incurred by the Company are listed.
- 2.) The Company will reconcile actual charges upon project completion and the Interconnection Customer will be responsible for all final charges, which may be higher or lower than estimated according to the NYSSIR I.C step 11.
- 3.) This estimate does not include the following:
  - additional interconnection study costs, or study rework
  - additional application fees,
  - applicable surcharges,
  - property taxes,
  - future operation and maintenance costs,
  - adverse field conditions such as weather and Interconnection Customer equipment obstructions,
  - extended construction hours to minimize outage time or Company's public duty to serve,
  - the cost of any temporary construction service, or
  - any required permits.
- 4.) Cost adders estimated for overtime would be based on 1.5 and 2 times labor rates if required for work beyond normal business hours. Per Diems are also extra costs potentially incurred for overtime labor.

**8.0 REVISION HISTORY**

<u>Revision</u>	<u>Date</u>	<u>Description</u>
0.0	11/18/2022	Original

# New York Community Solar Facility Decommissioning Plan

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March 2023

Prepared For:  
**LANSING COMMUNITY SOLAR, LLC**  
**GENIE SOLAR ENERGY**  
5.00 MW AC/ 6.252 MW DC Solar Project  
Lansingville Road, Lansing, NY 14882



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## Decommissioning Plan for Solar Facility

### 1. Introduction

Lansing Community Solar, LLC (the “**Project Company**”) proposes to build a photovoltaic (PV) solar facility (“**Solar Facility**”) under New York State’s Community Solar initiative. The Solar Facility is planned to have a cumulative nameplate capacity of 6.252 megawatts (MW DC) and be built on approximately 18.0 acres of private land located off Lansingville Road, Lansing, NY 14882 with Tax Map No. 16.-1-19.2 (the “**Facility Site**”).

The proposed Solar Facility will have an expected operating life of at least 40 years limited only by the land lease under which it operates. While economically unlikely for reasons outside the scope of this document, were the Solar Facility to cease operations, we are prepared to offer the following Decommissioning Plan (this “**Plan**”). This Plan provides an overview of activities that will occur during the decommissioning phase of the Solar Facility, including activities related to the restoration of land, the management of materials and waste, projected costs, and sets forth the terms by which such activities shall be carried out, including the payment and disposition of certain funds in connection therewith.

The Plan assumes the Solar Facility will be dismantled, and the applicable portion of the Facility Site restored to a state as close as reasonably possible to its pre-construction condition (normal wear and tear excepted) within 150 days following the permanent cessation of operations of such Solar Facility. The Plan also covers the case of the abandonment of a Solar Facility, for any reason, in case of early termination. The lack of production for 6 months (or for 12 of any 18 months) and the violation of any site plan conditions, the lack of a current permit or violation of permit conditions, including, but not limited to maintenance of any required decommissioning bond or security, shall be an event requiring decommissioning and the Solar Facility would be considered “**Abandoned**”. Except if such status is caused by events outside of System Operator’s reasonable control. Examples of this include Utility Initiated shutdowns which may occur (a) to eliminate conditions that constitute a potential hazard to Utility personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Utility system; (c) for routine maintenance, construction, and repairs on the Utility EPS.

Decommissioning of the Solar Facility will include the disconnection of the Solar Facility from the electrical grid and the removal of all Solar Facility components, including:

- Photovoltaic (PV) modules, panel racking and supports;
- Inverter units, substation, transformers, and other electrical equipment;
- Access roads, wiring cables, perimeter fence; and,
- Concrete foundations.

At the time of decommissioning, if the Landowner (as defined in Section 2 below) desires to keep any access roads, fencing, and trees installed as part of the Solar Facility, Landowner shall provide written notice of the same to the Project Company and the Project Company will not be obligated to remove such components. Subject to mutual

agreement by the Landowner and Project Company, responsibility of such improvements shall pass to the Landowner, who will be solely liable for such improvements, including maintenance. The Project Company shall have no further maintenance or removal obligations.

This decommissioning plan is based on current best management practices and procedures. Activities carried out in connection with this Plan should be in conformance with any applicable new standards and emergent best management practices at the time of decommissioning. All applicable permits will be obtained prior to decommissioning.

**2. The Proponent**

The Project Company will (i) manage and coordinate the approvals process in connection with the construction of the Solar Facility, and (ii) obtain all necessary regulatory approvals that vary depending on the jurisdiction, project capacity, and site location. The Project Company should strive to build a long-term relationship with the community hosting a Solar Facility and will be committed to the safety, health, and welfare of the townships.

Contact information for the proponent is as follows:

- Project Company:** Lansing Community Solar, LLC
- Contact:** Nathan Knapke, Genie Solar Energy
- Address:** 520 Broad Street  
Newark, NJ 07102
- Email:** nknapke@geniesolarenergy.com
  
- Project Information:**
- Address:** Lansingville Road, Lansing, NY 14882
- Coordinates:** Latitude 42.591761; Longitude -76.561025
- Project Size:** 5.00 MW AC / 6.252 MW DC
- Landowner:** David and Frank Turek
- Own/Lease:** Lease

**3. Decommissioning of the Solar Facility**

Within 150 days following the permanent cessation of operations, including in the case of early termination, of the Solar Facility (the “**Decommissioning Phase**”), Project Company or its successors and/or assigns shall remove the installed components of each such Solar Facility, and use commercially reasonable measures to restore the applicable portion of the Facility Site to a state as close as reasonably possible to its pre-construction condition, normal wear and tear excepted (the “**Decommissioning Activities**”). All Decommissioning Activities will be done in accordance with any then-applicable regulations and manufacturer recommendations. All applicable permits required in connection with the Decommissioning Activities will be acquired.

**3.1 Equipment Dismantling and Removal**

Generally, the decommissioning of a Solar Facility proceeds in the reverse order of the installation.

1. The Solar Facility shall be disconnected from the utility power grid.
2. PV modules shall be disconnected, collected, and disposed at an approved solar module recycler or reused / resold on the market.
3. All aboveground and underground electrical interconnection and distribution cables shall be removed and disposed off-site by an approved facility.
4. Galvanized steel PV module support and racking system support posts shall be removed and disposed off-site by an approved facility.
5. Electrical and electronic devices, including transformers and inverters shall be removed and disposed off-site by an approved facility.
6. Concrete foundations shall be removed and disposed off-site by an approved facility.
7. Fencing shall be removed and will be disposed off-site by an approved facility.

**3.2 Environmental Effects**

Decommissioning Activities, particularly the removal of project components could result in environmental effects similar to those of the construction phase. For example, there is the potential for disturbance (erosion/sedimentation/fuel spills) to adjacent watercourses or significant natural features. Mitigation measures similar to those employed during the construction phase of the Solar Facility will be implemented as required by applicable law or regulation. These mitigation measures will remain in place until the applicable portion of the site is stabilized in order to mitigate erosion and silt/sediment runoff and any impacts on the significant natural features or water bodies located adjacent to the Facility Site as required by law or permit. Any surface restoration may require permit coverage for soil disturbance in effect at the time of decommissioning, whether it be of Town or State level.

Road traffic will temporarily increase due to the movement of decommissioning crews and equipment. There may be an increase in particulate matter (dust) in adjacent areas during the Decommissioning Phase. Decommissioning activities may lead to temporary elevated noise levels from heavy machinery and an increase in trips to the project location. Work will be undertaken during daylight hours and conform to any applicable restrictions.

**3.3 Site Restoration**

During the Decommissioning Phase of the Solar Facility, Project Company or its successors and/or assigns shall restore the applicable portion of the Facility Site to a state as close as reasonably possible to its pre-construction condition.

Except to the extent requested by the Landowner and allowed by the Town Planning Board, all project components (discussed in **Table 1**) will be removed. Decompaction of soils up to 18 inches within the array area and removal of any installed materials to 4 feet shall occur. The access road outside of the fence line leading to the facility may remain in place at the discretion of the Landowner. Site restoration shall generally follow the New York State Department of Agriculture and Markets Guidelines for Agricultural Mitigation for Solar Energy Projects, as applicable. Rehabilitated lands will be seeded with a non-invasive and native species to help stabilize soil conditions, enhance soil structure, and increase soil fertility.

**3.4 Managing Materials and Waste**

During the Decommissioning Phase of the Solar Facility a variety of excess materials and wastes (listed in **Table 1**) will be generated. Most of the materials used in a Solar Facility are reusable or recyclable and some equipment may have manufacturer take-back and recycling requirements. Any remaining materials will be removed and disposed of off-site at an appropriate facility. The Project Company will establish policies and procedures to maximize recycling and reuse and will work with manufacturers, qualified local subcontractors, and waste firms to segregate material to be disposed of or recycled.

The Project Company will be responsible for the logistics of collecting and recycling the PV modules and will make commercially reasonable efforts to minimize the potential for modules to be discarded in the municipal waste stream. Currently, some manufacturers and new companies are looking for ways to recycle and/or reuse solar modules when they have reached the end of their lifespan. Due to a recent increase in the use of solar energy technology, a large number of panels from a variety of projects will be nearing the end of their lifespan in 15 - 25 years. It is anticipated there will be more recycling options available for solar modules at that time. The Project Company shall determine the method of disposing of the components of the Solar Facility using industry standards at the time of decommissioning. Project Company may sell all such materials for reuse, salvage or scrap in addition to other available disposal options.

Project Company will have no responsibility for any of the components, equipment or materials described herein that are owned by the utility, as opposed to Project Company. All such property of the utility will be the responsibility of the utility.



**Table 1: Management of Excess Materials and Waste**

Material / Waste	Means of Managing Excess Materials and Waste
PV panels	If there is no possibility for reuse, the panels will either be returned to the manufacturer for appropriate disposal or will be transported to a recycling facility where the glass, metal and semiconductor materials will be separated and recycled, or otherwise to an appropriate disposal facility.
Metal array mounting racks and steel supports	These materials will be disposed off-site at an appropriate disposal facility.
Transformers and substation components	The small amount of oil from the transformers will be removed on-site to reduce the potential for spills and will be transported to an appropriate facility for disposal. The substation transformer and step-up transformers in the inverter units will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Inverters, fans, fixtures	The metal components of the inverters, fans and fixtures will be disposed of or recycled, where possible. Remaining components will be disposed of in accordance with the standards of the day.
Gravel (or other granular)	It is possible that the Town may accept uncontaminated material without processing for use on local roads, however, for the purpose of this report it is assumed that the material will be removed from the project location by truck to a location where the aggregate can be processed for salvage. It will then be reused as fill for construction. It is not expected that any such material will be contaminated.
Geotextile fabric	It is assumed that during excavation of the aggregate, a large portion of the geotextile will be “picked up” and sorted out of the aggregate at the aggregate reprocessing site. Geotextile fabric that is remaining or large pieces that can be readily removed from the excavated aggregate will be disposed of off-site at an appropriate disposal facility.
Concrete inverter / transformer Foundations	Concrete foundations will be broken down and transported by certified and licensed contractor to a recycling or appropriate disposal facility.
Cables and wiring	The electrical line that connects the substation to the point of common coupling will be disconnected and disposed of at an approved facility. Support poles, if made of untreated wood, will be chipped for reuse or otherwise disposed of at an appropriate disposal facility. Associated electronic equipment (isolation switches, fuses, metering) will be transported off-site to be sent back to the manufacturer, recycled, reused, or safely disposed off-site in accordance with current standards and best practices.
Fencing	Fencing will be removed and recycled at a metal recycling facility or otherwise disposed of at an appropriate disposal facility.
Debris	Any remaining debris on the site will be separated into recyclables/residual wastes and will be transported from the site and managed as appropriate.

**3.5 Decommissioning Notification**

Prior to commencement of decommissioning activities, the Project Company shall notify the Town and the Landowner. Federal, state, and local authorities will be notified as required by permit or otherwise by law to discuss the potential approvals required to engage in decommissioning activities.

**3.6 Approvals**

Well-planned and well-managed renewable energy facilities are not expected to pose environmental risks at the time of decommissioning. Decommissioning of a Solar Facility will follow standards of the day. The Project Company, or Landowner if they become the owner of the Solar Facility, shall obtain all required federal, state, and local permits prior to decommissioning. All Decommissioning Activities shall be conducted in accordance with all applicable laws at the time of such activities.

**4. Costs of Decommissioning**

A New York State Licensed Professional Engineer prepared an itemized cost estimate to decommission a 6.252 MW DC Solar Facility, based on guidance from NYSEERDA and estimates from the Massachusetts solar market, a mature solar market with experience decommissioning projects. The cost estimate is provided under separate cover. The salvage values of valuable recyclable materials (aluminum, steel, copper, etc) are not factored into the decommissioning cost estimate. The scrap value will be determined on current market rates at the time of salvage. In the future, when the decommissioning and restoration cost is reevaluated, the decommissioning amount may be reduced by the amount of the estimated salvage value of the Solar Energy System, with the Town's approval. The decommissioning estimate does not take into consideration inflationary rise since the costs will be re-evaluated every three years, as stated below in Section 5.

**5. Decommissioning Surety**

Financial surety for the purpose of decommissioning activities in accordance with this plan will be provided through a bond, letter of credit, or an escrow payment, as approved by the Planning Board, and to be established prior to the issuance of the building permit. The amount of financial surety will be calculated at a minimum of 125% of the approved estimated cost of decommissioning and restoration. At least once every three years after issuance of the building permit, the Project Company shall provide updated certified cost estimate for decommissioning, removal, restoration, and if the resulting 125% cost requirement shows that the existing financial surety is insufficient, then the Project Company shall update such surety or see to its replacement or supplementation on an amount to equal such updated minimum 125% cost number. This three-year update will account for increases in the cost of decommissioning. A decommissioning cost estimate is provided under separate cover.

**6. Municipal Filing**

A copy of this Plan shall be filed by the Project Company in the office of the County Clerk in the register of deeds and indexed by the Landowner's name prior to the final inspection of the Solar Facility by the Town.

**7. Modifications**

No modifications, waivers, or changes shall be made to the terms and conditions of this Agreement except as may be mutually agreed upon in writing by both the Town and the Project Company, such agreement shall not be unreasonably withheld.

**8. Assignment**

In the event Project Company transfers the Solar Facility to any third party, including any affiliate of the Project Company, Project Company's rights and obligations under this Plan shall be assigned in their entirety to such third party, who shall be considered the "Project Company" after the date of such assignment. The Project Company shall notify the Town of its intent to assign this Plan to the third party. The assignment will be subject to the Town's approval which shall not to be unreasonably withheld.

**9. Miscellaneous**

Town and Project Company each binds itself and all their respective successors and assigns with respect to all covenants of this Plan. This Plan represents the entire agreement between the Town and the Project Company with respect to the decommissioning of the Solar Facility. This Plan may be executed in multiple counterparts, each of which shall be considered an original and all of which taken together shall constitute one and the same instrument. Copies of the executed signature page of this Agreement transmitted in PDF format shall be considered delivery of the original.



# Operations & Maintenance Plan

Operations, Maintenance, and Commissioning of a Ground Mounted Solar Farm

**VERSION 1**  
**MARCH 2023**

**Project Owner:**

Lansing Community Solar, LLC  
Genie Solar Energy

**Project Address:**

Lansingville Road,  
Lansing, NY 14882

**Municipality:**

Town of Lansing  
Tompkins County

## Operation & Maintenance Plan

### 1. Overview

In comparison to other generating technologies, solar PV power plants are relatively low maintenance and have limited servicing requirements. Lansing Community Solar, LLC (Project Company) understands that proper maintenance of a PV plant is essential to maximize both energy yield and the plant’s useful life and has planned the following scheduled maintenance and procedures to ensure quality operation.

The following Operations and Maintenance Plan (O&M Plan) has been created for the annual maintenance and operation of the solar facility located off Lansingville Road, Lansing, Tompkins County, New York. All reports, maintenance requests, and service calls will be directed to the Project Owner and performed at their discretion and on an as needed basis unless otherwise stated in the plan.

This plan will be updated on as needed basis as directed by the Project Owner. Version history of this report is listed below:

Version	Created Date	Notes
1.0	03/22/2023	AHJ Submittal

### 2. Service Provider

The Project Company intends to contract with a qualified O&M Provider to monitor the facility, conduct scheduled maintenance, and make repairs as necessary to ensure the guaranteed energy output of the array. A qualified O&M provider shall meet the definition of a qualified person per the National Electric Code described as one who has skills and knowledge related to the construction and operation of the electrical equipment and installations and has received safety training to recognize and avoid the hazards involved. When the O&M provider is selected, their name and contact information will be provided to the Town of Lansing Building Department.

### 3. Emergency Response and Site Security

The facility is remotely monitored by the selected O&M Provider and Project Owner 24/7/365. The Facility is equipped with remote diagnostics and video surveillance. In general, emergencies and security breaches on site will be identified through system alarms sent to the Provider and their staff to be addressed accordingly. However, The Project Company recognizes that possibilities exist to experience an emergency or security breach outside of the alarm parameters.

***In the event of a fire at the Project Site, the general procedure is as follows:***

1. Person discovering the fire shall immediately contact 911 to engage local emergency services followed by the Project Company through use of the Emergency Contact Number and Facility Address provided at the Facility entrance gate.

2. Individuals are expected to wait for emergency services and MUST NOT attempt to extinguish fire near electrical equipment (e.g., PV solar arrays or inverters) with water or other chemicals as an electric shock or arc could occur. Qualified Personnel, including the emergency services personnel, may find it necessary to shut off connectivity to the facility through the Main Utility Disconnect. The location of which is posted at the facility entrance gate and will be reviewed during the local fire department walk-through and training upon system construction. The O&M provider may be dispatched to the site to assist in shut off procedure and/or assess damages to the facility.
3. A designated O&M employee may meet fire fighters at the Project Site entrance and direct them to the location of the fire if required.
4. O&M Provider to prepare a summary of the incident as soon as possible after the incident to be supplied to the Project Owner.

The facility is secured by a perimeter fence with locked access gates to prevent unauthorized access. However, Project Owner recognizes that the possibility exists for unauthorized access.

***In the event of trespassing within the Project Site, the general procedure is as follows:***

1. Person concerned of the unauthorized access shall immediately contact the Project Company through use of the Emergency Contact Number and Facility Address provided at the facility entry gate.
2. Project Company and/or O&M Service Provider will contact local authorities as needed, at their discretion, to resolve the issue.
3. A designated O&M employee may meet local authorities at Project Site entrance as directed by the Project Owner or as needed to re-secure the facility.
4. O&M Provider to prepare a summary of the incident as soon as possible and no later than 24 hours after the incident to be supplied to the Project Owner.

**4. Scheduled Maintenance**

Provider will service inverters, disconnects, and other components in accordance with all manufacturers recommended intervals and procedures and in accordance with all local laws. Scheduled Maintenance will include but is not limited to the following:

- a) Inverter Servicing
  - i. Visual Inspections
  - ii. Cleaning Filters
  - iii. Removal of Dust
  - iv. Torquing of Connections
  - v. Additional Diagnostic Screens recommended by the Manufacturer.
- b) Connection Integrity
  - i. Visual Inspections
  - ii. Fuse Testing
  - iii. Thermal Imaging for purpose of identify potential faults within the array.



- c) Structural Integrity
  - i. Visual Inspections of Racking and Equipment Pads
  - ii. Torquing of Connections
- d) Site Maintenance
  - i. Vegetation Control to maintain growth to prevent production loss.
  - ii. Any vegetative screening that was required as part of site plan approval will be maintained and replaced as necessary to maintain visual buffer in the spirit of the approved site plan.
  - iii. Erosion Control and Repair as necessary to maintain navigable access to areas of the area unless otherwise required by the SWPPP prepared for the Project. All repair to be performed at direction of Project Owner or the Town on an as-needed basis.
  - iv. All forbs/grass within the fenced perimeter to be maintained at a height not to impede production of or access to the Project Facility. However, excessive mowing will not occur so to encourage the growth of pollinator species and a well-vegetated ground cover beneath the array.
- e) Access Path Maintenance
  - i. Snow Removal as reasonably required to maintain access to essential electrical components. Removal will be performed at the direction of Project Owner on an as-needed basis.
  - ii. Erosion Control and Repair as necessary to maintain navigable access to areas of the area. Repair to be performed at direction of Project Owner or the Town on an as-needed basis.
- f) Balance of System
  - i. The remaining components such as the communication systems and auxiliary power supplies will be tested regularly to ensure the signal strength and connection remains constant.

#### **5. Screening Tree Maintenance and Replacement**

The planted screening trees will be inspected periodically to ensure that they are healthy. The maintenance of the screening trees will include but is not limited to the following:

- a) Periodic inspections will be performed to ensure that the screening trees are healthy.
- b) The trees will be watered, pruned (only where necessary), and fertilizer will be applied as needed to ensure that they are healthy and performing/growing as intended.
- c) All sickly trees identified will be treated appropriately to remedy their deficiencies or illnesses.
- d) All dead trees will be replaced by the Project Owner, as needed, to maintain the visual screening.

#### **6. Unscheduled Maintenance**

- a) Tightening connections
- b) Replacement of fuses
- c) Repair damaged components
- d) Repairing communication faults
- e) Repair mounting structure

**7. Spare Parts**

To facilitate a rapid response in the event of equipment failure, a suitable stock of spare parts will be made available at the site by the selected O&M provider. Spare parts may include but are not limited to the following:

- a) Modules
- b) Combiner Boxes
- c) Communication System
- d) DC and AC Cabling Components
- e) Fuses

**8. Performance Monitoring and Evaluation**

A SCADA system will be implemented to monitor the real-time PV system production to compare to the modeled efficiency to assess if the system is operating optimally. The selected O&M provider will use this information to schedule urgent repairs or maintenance activities.

**9. SWPPP Inspections (as Required)**

During construction, weekly Stormwater Pollution Prevention Plan (SWPPP) inspections will be performed by a qualified inspector in accordance with the SWPPP Inspection and Maintenance Requirements. The weekly SWPPP inspections will be maintained on-site during construction. No post-construction stormwater controls that would require on-going maintenance or inspection are proposed at this site.

# PST-445W-M72H



# The Clear Choice

## 144 CELL SERIES

## 435W-445W



**Class Leading Output:**  
445W top tier power performance



**Advanced Technology:**  
Module efficiencies above 21%  
MONO PERC 5 busbar cells



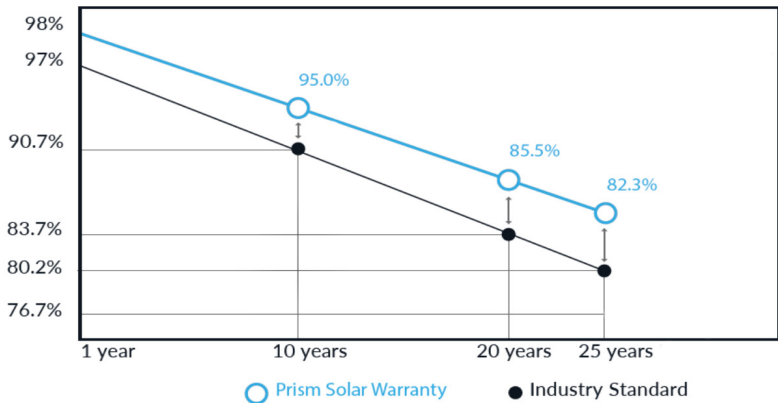
**Reduced System Costs:**  
1500V robust framed design  
drives lower installation costs



**Certified Reliability:**  
Tested above and beyond  
IEC Standards



Linear Performance Warranty



Proudly Engineering, Designed and Tested in the USA.



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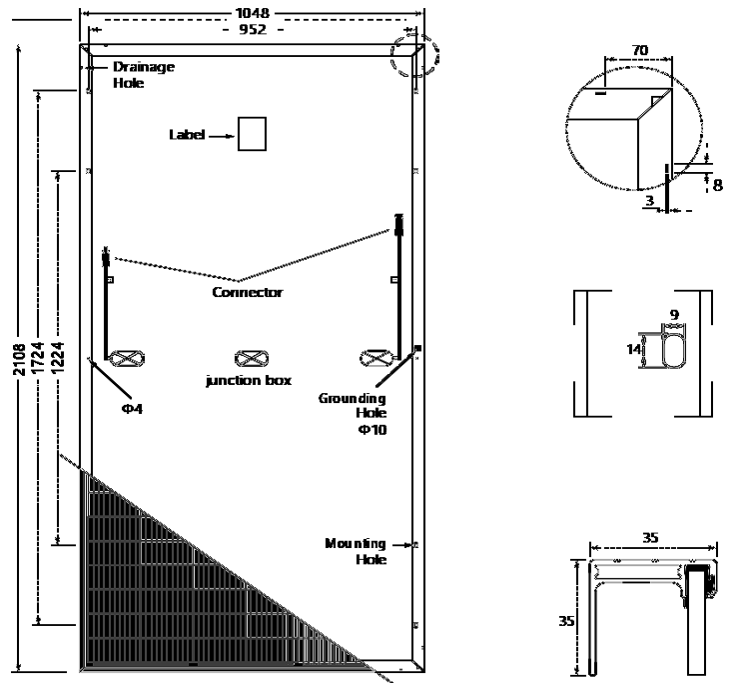


[www.prismsolar.com](http://www.prismsolar.com)

## Electrical Data PST-XXX-M72H 435W, 440W, 445W

### Projected specifications @ STC

Parameters		STC <sup>1</sup>
Rated Power	P <sub>max</sub> (W)	435/440/445
Rated Voltage	V <sub>mp</sub> (V)	41.66/41.81/41.96
Rated Current	I <sub>mp</sub> (A)	10.44/10.52/10.61
Open Circuit Voltage	V <sub>oc</sub> (V)	50.35/50.50/50.58
Short Circuit Current	I <sub>sc</sub> (A)	11.31/11.34/11.37
Module Efficiency	(%)	20.94/21.06/21.18
Max System Voltage	UL/IEC	1500V
Series Fuse Rating/Limiting Reverse Current		20A
Power Tolerance		-0/+5W
Electrical Parameter Tolerance		-5%/+5%
Power Temperature Coefficient		-0.37 %/°C
Voltage Temperature Coefficient (V <sub>oc</sub> )		-0.29 %/°C
Current Temperature Coefficient (I <sub>sc</sub> )		+0.05 %/°C
NOCT (C°)		45°C +/- 2°C



## Mechanical Data

Front Glass	3.2mm Tempered Low Iron, Anti-reflective coating
Frame Type	Anodized Aluminum Alloy
Bypass Diodes	3
Junction Box	IP68 with bypass-diodes
Cable (Type/Gauge/Length)	PV Wire 12 AWG 1400mm 4mm <sup>2</sup>
Connectors	MC4 compatible
Exterior Glass Dimensions	2108mm X 1048mm X 35mm (83in X 41.26in X 1.38in)
Weight	25kg (55 lbs.)

## Operating Conditions

Temperature	-40°C to 85°C (-40°F to 185°F)
Max Mechanical Load <sup>3</sup>	5400 Pa wind load 5400 Pa snow load
Hail Safety Impact Velocity	

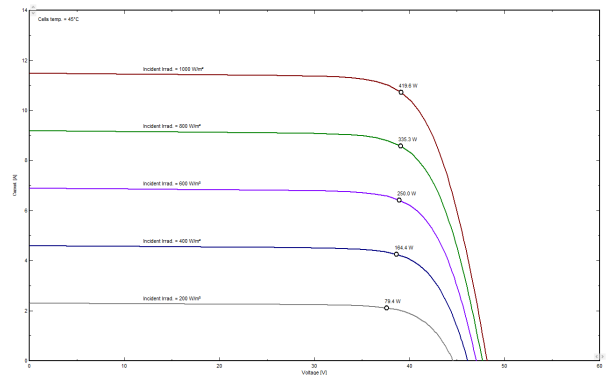
## Certifications & Warranty

Certifications and Listings	IEC61215/61730, CEC, Salt Mist
Fire Rating	Type=1 ; Class C
Limited Warranty (Workmanship/Power)	25 Years/25 Years Output <sup>4</sup>

- 1 - Measured at Standard Testing Conditions (STC): cell temp 25°C, AM1.5, 1000W/m<sup>2</sup>.
- 2 - Length and width dimensions are +/- 5mm.
- 3 - To achieve this max weight loading, the support and racking system must meet the mechanical weight loading specified.
- 4 - Please see the Prism Solar Warranty for complete details.

## Dimensions, mm [in]

Length & width dimensions and j-box location are +/- 5mm.



Temperature Dependence PST-445W-M72H

**Prism Solar**  
TECHNOLOGIES

520 Broad Street, Newark NJ 07102

845-883-4200

[www.prismsolar.com](http://www.prismsolar.com)

IMPORTANT: Prism modules are rated at STC conditions

CAUTION: Read the Installation Manual and Design Guide carefully before using this product. All specifications are subject to change without notice.

PST-xxxW-M72H specifications, all values subject to change without notice. All rights reserved. rev 1



# 100/125kW, 1500Vdc String Inverters for North America



The 100 & 125kW high power CPS three phase string inverters are designed for ground mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 99.1% peak and 98.5% CEC, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 100/125kW products ship with the Standard or Centralized Wire-box, each fully integrated and separable with AC and DC disconnect switches. The Standard Wire-box includes touch safe fusing for up to 20 strings. The CPS Flex Gateway enables communication, controls and remote product upgrades.

## Key Features

- NFPA 70, NEC 2014 and 2017 compliant
- Touch safe DC Fuse holders adds convenience and safety
- CPS Flex Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 1 MPPT with 20 fused inputs for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Advanced Smart-Grid features (CA Rule 21 certified)
- kVA Headroom yields 100kW @ 0.9PF and 125kW @ 0.95PF
- Generous 1.87 and 1.5 DC/AC Inverter Load Ratios
- Separable wire-box design for fast service
- Standard 5 year warranty with extensions to 20 years



100/125KTL Standard Wire-box



100/125KTL Centralized Wire-box

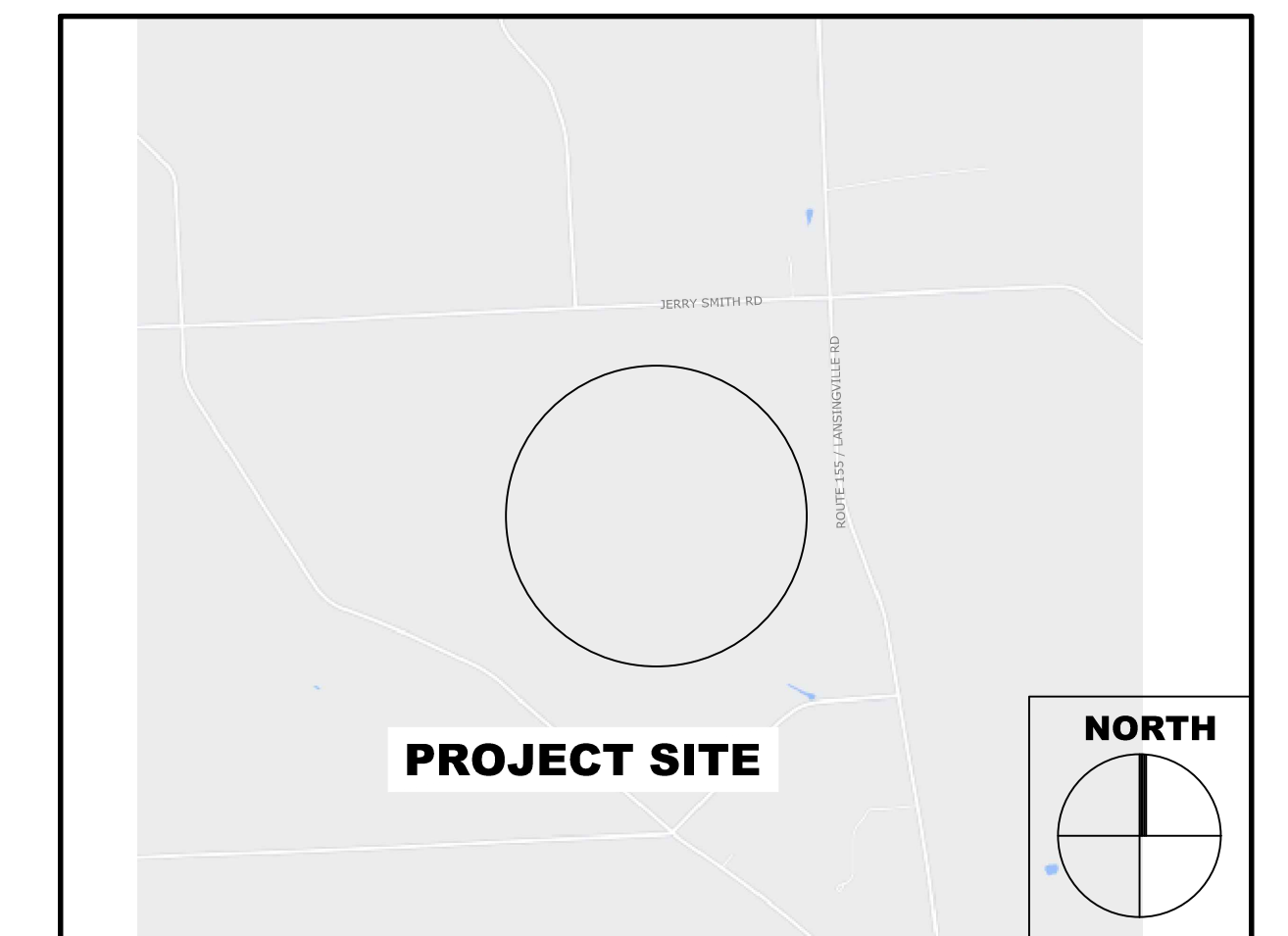
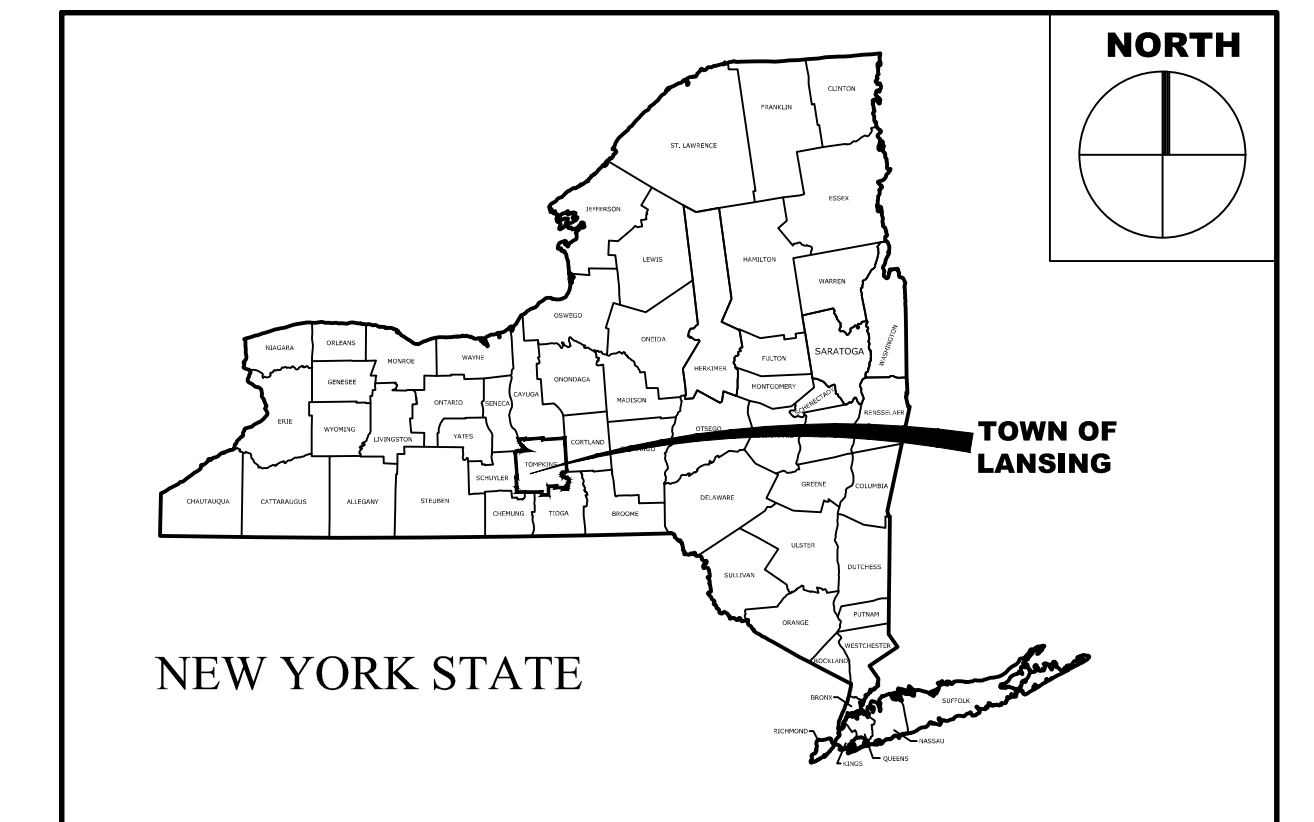
Model Name	CPS SCH100KTL-DO/US-600	CPS SCH125KTL-DO/US-600
<b>DC Input</b>		
Max. PV Power	187.5kW	
Max. DC Input Voltage	1500V	
Operating DC Input Voltage Range	860-1450Vdc	
Start-up DC Input Voltage / Power	900V / 250W	
Number of MPP Trackers	1	
MPPT Voltage Range <sup>1</sup>	870-1300Vdc	
Max. PV Input Current (Isc x1.25)	275A	
Number of DC Inputs	20 PV source circuits, pos. & neg. fused (Standard Wire-box) 1 PV output circuit, 1-2 terminations per pole, non-fused (Centralized Wire-box)	
DC Disconnection Type	Load-rated DC switch	
DC Surge Protection	Type II MOV (with indicator/remote signaling), Up=2.5kV, In=20kA (8/20uS)	
<b>AC Output</b>		
Rated AC Output Power	100kW	125kW
Max. AC Output Power <sup>2</sup>	100kVA (111KVA @ PF>0.9)	125kVA (132KVA @ PF>0.95)
Rated Output Voltage	600Vac	
Output Voltage Range <sup>3</sup>	528-660Vac	
Grid Connection Type <sup>4</sup>	3Φ / PE / N (Neutral optional)	
Max. AC Output Current @600Vac	96.2/106.8A	120.3/127.2A
Rated Output Frequency	60Hz	
Output Frequency Range <sup>3</sup>	57-63Hz	
Power Factor	>0.99 (±0.8 adjustable)	>0.99 (±0.8 adjustable)
Current THD	<3%	
Max. Fault Current Contribution (1-cycle RMS)	41.47A	
Max. OCPD Rating	150A	175A
AC Disconnection Type	Load-rated AC switch	
AC Surge Protection	Type II MOV (with indicator/remote signaling), Up=2.5kV, In=20kA (8/20uS)	
<b>System</b>		
Topology	Transformerless	
Max. Efficiency	99.1%	
CEC Efficiency	98.5%	
Stand-by / Night Consumption	<4W	
<b>Environment</b>		
Enclosure Protection Degree	NEMA Type 4X	
Cooling Method	Variable speed cooling fans	
Operating Temperature Range	-22°F to +140°F / -30°C to +60°C (derating from +113°F / +45°C)	
Non-Operating Temperature Range <sup>5</sup>	-40°F to +158°F / -40°C to +70°C maximum	
Operating Humidity	0-100%	
Operating Altitude	8202ft / 2500m (no derating)	
Audible Noise	<65dBA@1m and 25°C	
<b>Display and Communication</b>		
User Interface and Display	LED Indicators, WiFi + APP	
Inverter Monitoring	Modbus RS485	
Site Level Monitoring	CPS Flex Gateway (1 per 32 inverters)	
Modbus Data Mapping	SunSpec/CPS	
Remote Diagnostics / FW Upgrade Functions	Standard / (with Flex Gateway)	
<b>Mechanical</b>		
Dimensions (WxHxD)	45.28x24.25x9.84in (1150x616x250mm) with Standard Wire-box 39.37x24.25x9.84in (1000x616x250mm) with Centralized Wire-box	
Weight	Inverter: 121lbs / 55kg; Wire-box: 55lbs / 25kg (Standard Wire-box); 33lbs / 15kg (Centralized Wire-box)	
Mounting / Installation Angle	15 - 90 degrees from horizontal (vertical or angled)	
AC Termination	M10 Stud Type Terminal Block [3Φ] (Wire range: 1/0AWG - 500kcmil CU/AL, Lugs not supplied) Screw Clamp Terminal Block [N] (#12 - 1/0AWG CU/AL)	
DC Termination	Screw Clamp Fuse Holder (Wire range: #12 - #6AWG CU) - Standard Wire-box Busbar, M8 PEMserts (Wire range: #1AWG - 250kcmil CU/AL, Lugs not supplied) - Centralized Wire-box	
Fused String Inputs	15A or 20A fuses provided (Determined by product SKU)	
<b>Safety</b>		
Safety and EMC Standard	UL1741-SA-2016, CSA-C22.2 NO.107.1-01, IEEE1547a-2014; FCC PART15	
Selectable Grid Standard	IEEE 1547a-2014, CA Rule 21, ISO-NE	
Smart-Grid Features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAr, Freq-Watt, Volt-Watt	
<b>Warranty</b>		
Standard <sup>6</sup>	5 years	
Extended Terms	10, 15 and 20 years	

1) See user manual for further information regarding MPPT Voltage Range when operating at non-unity PF  
2) \*Max. AC Apparent Power\* rating valid within MPPT voltage range and temperature range of -30°C to +40°C (-22°F to +104°F) for 100KW PF ≥0.9 and 125KW PF ≥0.95  
3) The "Output Voltage Range" and "Output Frequency Range" may differ according to the specific grid standard.  
4) Wye neutral-grounded, Delta may not be corner-grounded.  
5) See user manual for further requirements regarding non-operating conditions.  
6) 5 year warranty effective for units purchased after October 1st, 2019.



# LANSING 5MW (AC)/6.25MW(DC) PV SYSTEM 528 LANSINGVILLE RD, LANSING NY 14882

UTILITY SUBMISSION - MAY 24, 2022



**SITE LOCATION MAP**

### DRAWING LIST

SHEET ID	SHEET TITLE	SHEET NUMBER
G-001	COVER PAGE	1
E-101	ELECTRICAL SITE PLAN	2
E-601	ELECTRICAL ONE-LINE DIAGRAM	3
E-602	ELECTRICAL THREE-LINE DIAGRAM	4
E-603	ELECTRICAL SCHEDULES	5

## UTILITY SUBMISSION

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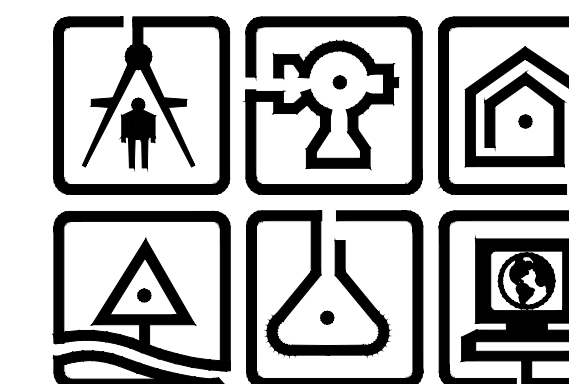
WARNING: IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT IS ALTERED, THE ALTERING ARCHITECT SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE 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

## C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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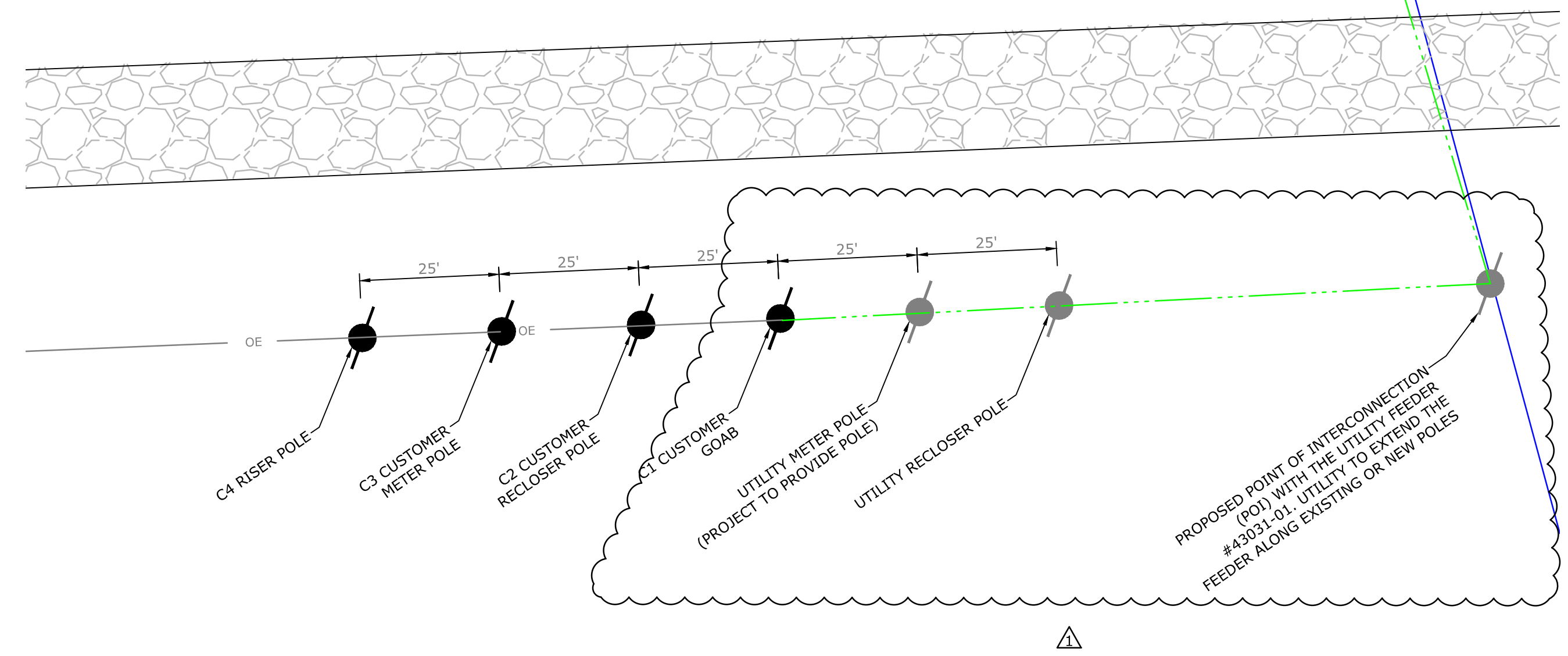
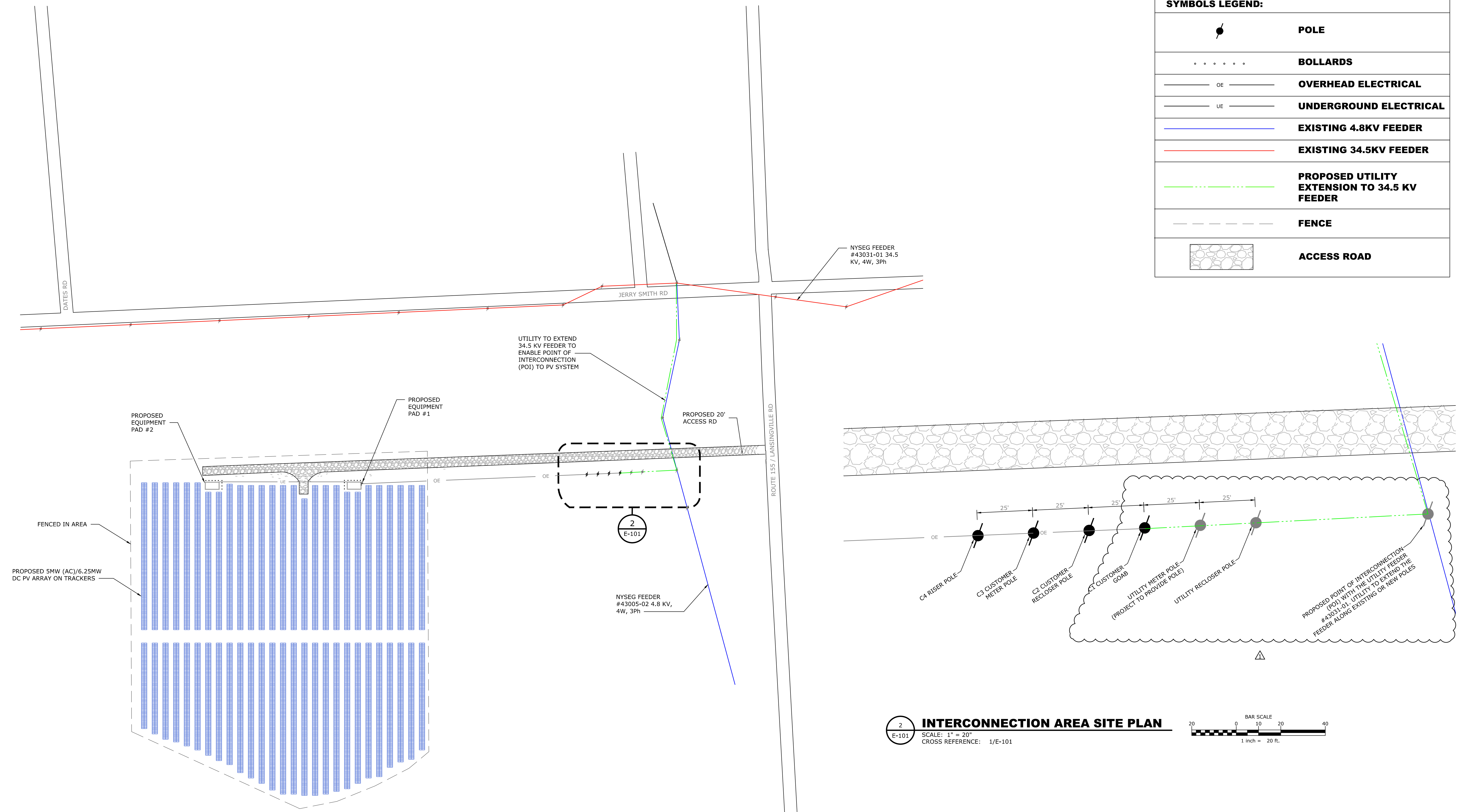
PROJECT NO. 22.2303  
DRAWING NO.

# G-001

SHEET 1 OF 5



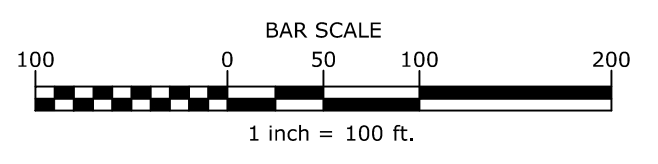
SYMBOLS LEGEND:	
	<b>POLE</b>
	<b>BOLLARDS</b>
	<b>OVERHEAD ELECTRICAL</b>
	<b>UNDERGROUND ELECTRICAL</b>
	<b>EXISTING 4.8KV FEEDER</b>
	<b>EXISTING 34.5KV FEEDER</b>
	<b>PROPOSED UTILITY EXTENSION TO 34.5 KV FEEDER</b>
	<b>FENCE</b>
	<b>ACCESS ROAD</b>



**2 INTERCONNECTION AREA SITE PLAN**  
 SCALE: 1" = 20"  
 CROSS REFERENCE: 1/E-101



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



# UTILITY SUBMISSION

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					SCALE: AS NOTED
					DATE: JUNE 24, 2022

BRAD R. GARRISON  
P.E. NO. 105776

**ELECTRICAL SITE PLAN**

**LANSING 5MW (AC)/6.25MW(DC) PV SYSTEM**  
**528 LANSINGVILLE RD, LANSING NY 14882**

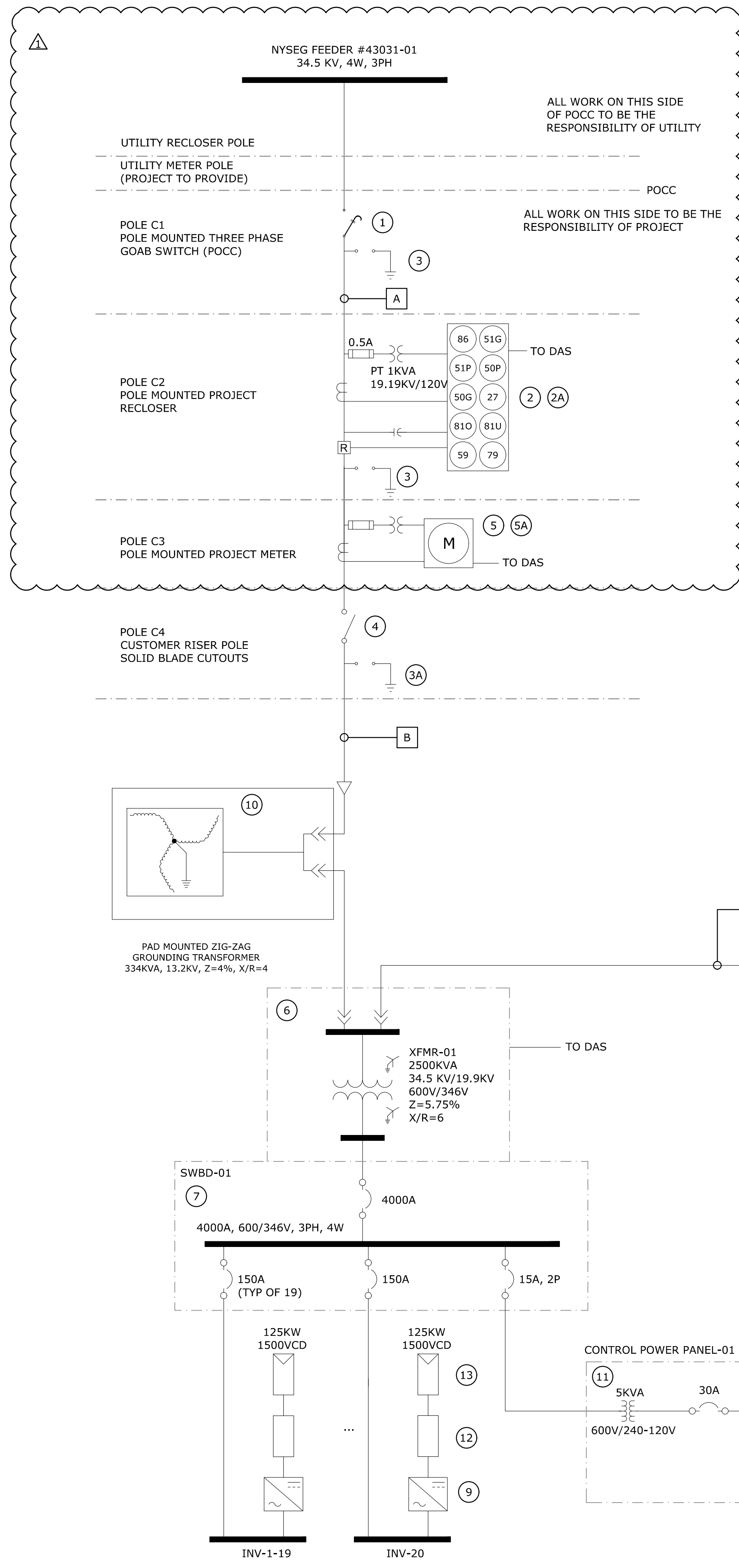
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**E-101**

SHEET 2 OF 5  
 DWG. NO: 22-230





### PROTECTIVE RELAY SETTINGS

TRIP FUNCTIONS		VOLTAGE SETTINGS							
FUNCTION	ANSI	REQUIRED VOLTAGE PICKUP RANGE	TRIP SETTING %	TRIP SETTING (PRIMARY VOLTS)	TOTAL CLEARING TIME (SECONDS)	RELAY TD			
						(SECONDS)	(CYCLES)	(SECONDS)	(CYCLES)
UNDERVOLTAGE 1	27	V < 50%	50%	9959.3	1.10	1.05	63.00	0.05	3.00
UNDERVOLTAGE 2	27	50% ≤ V ≤ 88%	88%	17528.4	2.00	1.95	117.00	0.05	3.00
OVERVOLTAGE PHASE 1	59P	110% < V < 120%	110%	21910.4	2.00	1.95	117.00	0.05	3.00
OVERVOLTAGE PHASE 2	59P	V > 120%	120%	23902.3	0.16	0.11	6.50	0.05	3.00

TRIP FUNCTIONS		FREQUENCY SETTINGS							
FUNCTION	ANSI	REQUIRED FREQUENCY PICKUP RANGE	TRIP SETTING (HERTZ)	TOTAL CLEARING TIME (SECONDS)	RELAY TD				
					(SECONDS)	(CYCLES)	(SECONDS)	(CYCLES)	
UNDERFREQUENCY 1	81U	≤ 56.5 HZ	56.5	0.16	0.11	6.25	0.05	3.00	
UNDERFREQUENCY 2	81U	≤ 58.5 HZ	58.5	300.00	299.94	17546.75	0.05	3.00	
OVERFREQUENCY 1	81O	61.2 HZ ≤ F < 62 HZ	61.2	300.00	299.94	18356.50	0.05	3.00	
OVERFREQUENCY 2	81O	> 62 HZ	62.0	0.16	0.11	6.75	0.05	3.00	

TRIP FUNCTIONS		OVERCURRENT SETTINGS					
FUNCTION	ANSI	TAP	CURRENT (A)	CURVE	TIME DIAL	TIME DELAY (CYC)	
TIME OVERCURRENT PHASE	51P	0.52	104.59	U4	0.50	0	
TIME OVERCURRENT GROUND	51G	0.13	25.00	U4	0.50	0	
FUNCTION		TAP	CURRENT (A)	TIME DELAY (CYC)			
TIME OVERCURRENT PHASE	50P	4.18	836.70	0.00			
TIME OVERCURRENT GROUND	50G	1.25	250.00	0.00			

TRIP FUNCTIONS		AUTO RECLOSE SETTINGS	
FUNCTION	ANSI	TIME DELAY (S)	TIME DELAY (CYC)
RECLOSING	79	300	18000

### SYMBOLS LEGEND:

- DEMARKS SEPARATION BETWEEN POLES
- COMMUNICATION (NON-POWER) CONNECTION
- POWER CONNECTION
- EQUIPMENT ENCLOSURE
- CIRCUIT BREAKER
- SOLID BLADE CUTOUT
- FUSED CUTOUT
- INVERTER
- SURGE ARRESTER
- TRANSFORMER
- WYE - GROUNDED
- EQUIPMENT TAG - SEE SHEET E-603
- CABLE TAG - SEE SHEET E-603

- ### NOTES:
- INTERCONNECTION UTILITY COMPANY IS NYSEG.
  - ALL EQUIPMENT ON THE LINE SIDE OF THE POINT OF COMMON COUPLING (POCC) IS TO BE PROVIDED AND INSTALLED BY NYSEG, UNLESS NOTED OTHERWISE.
  - INTERCONNECTION DETAILS E.G. LOCATIONS OF EQUIPMENT, SCOPE OF RESPONSIBILITY, TESTING REQUIREMENTS, ARE SUBJECT TO CHANGE AND NOT FINAL UNTIL APPROVED BY NYSEG.
  - PROJECT GOAB SWITCH SHALL BE READILY ACCESSIBLE (24/7) AND EQUIPPED WITH DOUBLE LOCKS FOR OPERATION EITHER BY THE PROJECT OR BY NATIONAL GRID.
  - PROTECTIVE RELAYS SHALL BE PROVIDED WITH DC BATTERY BACKUP AND FAIL-SAFE TRIP CHARGED FROM AC AUXILIARY POWER.
  - CONDUCTORS SIZED AS PER THE NEC 2017 REQUIREMENTS.
  - CUSTOMER ELECTRICAL EQUIPMENT WILL BE SERVICE ENTRANCE RATED AS IS REQUIRED BY NYSEG ESB 756B (7.2.1).
  - PV SYSTEM WILL HAVE A 5-MINUTE HEALTHY GRID RECONNECT FEATURE PROGRAMMED INTO THE RECLOSER. THIS WILL BE PROGRAMMED INTO THE RECLOSER TO DEFEAT THE CLOSE BUTTON AND BLOCK CLOSE UNTIL THE 5 MINUTE TIMER HAS COMPLETED. SETTINGS WILL BE PER IEEE 1547 SECTION 4.2.6 FOR 5 MINUTES. VOLTAGES WILL BE SET WITHIN ANSI C84.1 TABLE 1, RANGE B (6.84KV - 7.56KV ON 7.2KV BASE) AND FREQUENCY WILL BE WITHIN 59.3-60.5HZ. THE 5 MINUTE TIME INTERVAL WILL RESTART IF VOLTAGE OR FREQUENCY FALLS OUT OF THIS WINDOW.
  - PROTECTIVE RELAY ALARM CIRCUIT TO BE WIRED OR PROGRAMMED TO TRIP SWITCH FOR REDUNDANCY PER NYSEG REQUIREMENTS. THIS IS RELAY FAIL SAFE PROTECTION. FOR RECLOSER THE ALARM WORD BIT IS USED TO TRIP (AND BLOCK CLOSE) ON LOSS OF DC POWER AND ON RELAY FAILURES. BTFAIL IS USED FOR BATTERY FAILURE. LOSS OF 120VAC POWER TO THE RELAY WILL TRIP AND BLOCK/CLOSE. TRIP WILL BE IN LESS THAN 2.0 SECONDS.
  - GROUNDING TRANSFORMER IS PROTECTED BY RELAY (51G, WHICH IS ALSO USED FOR UTILITY PROTECTION), AND CAN ONLY BE DISCONNECTED BY RELAY.
  - INVERTER VOLTAGE AND FREQUENCY OUT-OF-RANGE DISCONNECTION TO BE IN ACCORDANCE WITH THE UL 1741 STANDARD.

### PROJECT SUMMARY

PV MODULE MAKE / MODEL	PRISM SOLAR, PST-445W-M72H
STC MODULE POWER (WP)	445
QTY OF MODULES	14050
INVERTER MAKE / MODEL	CHINT CPS SCH125KTL-DO/US-600
INVERTER NAMEPLATE (KW)	125
QTY OF INVERTERS	40
MODULES PER STRING	25
STRINGS PER INVERTER	14 OR 15
TOTAL DC POWER RATING (MWDC)	6,252
TOTAL AC POWER RATING (MWAC)	5,000

## UTILITY SUBMISSION

**1 ELECTRICAL ONE-LINE DIAGRAM**  
SCALE: NONE  
CROSS REFERENCE: NONE

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						PROJ. NO : 22.2303
						SCALE : AS NOTED
						DATE : JUNE 27, 2022

### ELECTRICAL ONE-LINE DIAGRAM

**LANSING 5MW (AC)/6.25MW(DC) PV SYSTEM**  
**528 LANSINGVILLE RD, LANSING NY 14882**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**  
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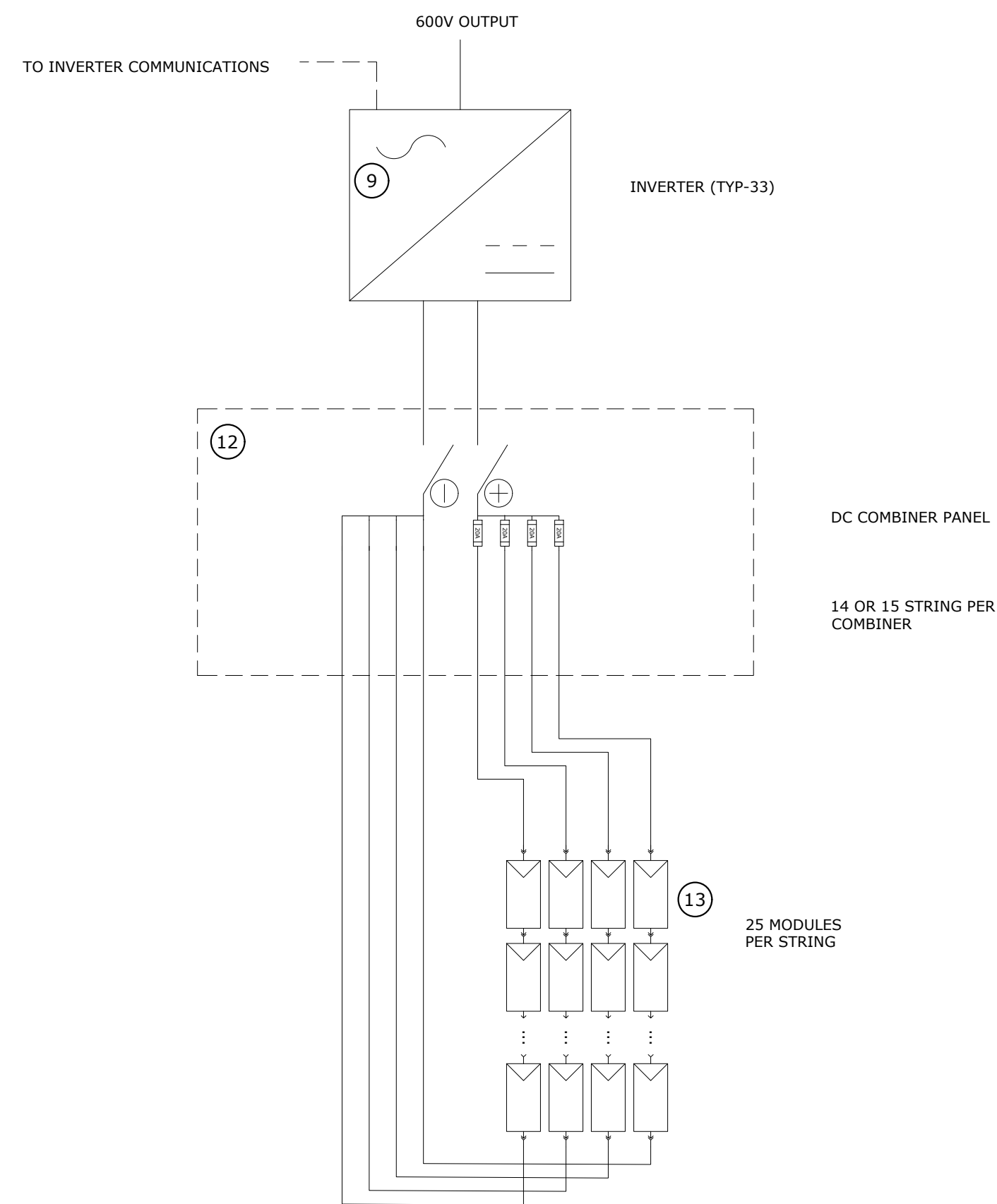
**E-601**  
SHEET 3 OF 5  
DWG. NO: 22-230





CABLE SCHEDULE															
ID	FROM	TO	# CONDUCTORS	VOLTAGE	MAX CURRENT (A)	MIN CONDUCTOR AMPACITY REQUIRED (A)	CONDUCTOR AMPACITY (A)	CONDUCTOR SIZE, DESCRIPTION	# NEUTRAL	NEUTRAL SIZE	# GROUND	GROUND SIZE	INSULATION TYPE	# CONDUIT	CONDUIT SIZE
A	POCC	RISER POLE	4	34500	83.7	104.6	185/110*	#2 AWG, ACSR SPARROW 6/1	1	#2 SPARROW	-	-	-	-	-
B	RISER POLE	XFMR-01	3	34500	83.7	104.6	130**	#2 AWG, AL, MV-105, 35KV, 133%, URD 1/3 NEUTRAL	-	CONCENTRIC	-	-	EPR	1	2" SCH 40 PVC
C	XFMR-01	XFMR-02	3	34500	41.8	52.3	75**	#6 AWG, AL, MV-105, 35KV, 133%, URD 1/3 NEUTRAL	-	CONCENTRIC	-	-	EPR	1	2" SCH 40 PVC

\* UNDER 25 C AMBIENT WIND AND SUN CONDITIONS / UNDER 25C AMBIENT NO WIND AND SUN CONDITIONS  
 \*\* CONDUCTOR AMPACITY BASED ON NEC (2017) TABLE 310.60(C)(78)



**1**  
**TYPICAL INVERTER CONFIGURATION**  
 SCALE: NONE  
 CROSS REFERENCE: 1/E-602

EQUIPMENT SCHEDULE								
ID	EQUIPMENT NAME	QTY	MAKE / MODEL	VOLTAGE (V)	AMPERAGE (A)	NEMA RATING	KAIC RATING	DESCRIPTION
1	GOAB SWITCH	1	S&C OR EQUAL	-	600	-	N/A	34.5 KV, ALDUTI-RUPTER SWITCH
2	POLE MOUNTED RECLOSER	1	G&W ELECTRIC VIPER	-	800	3R	16	38 KV
3	RECLOSER CONTROLLER	1	SEL-651R-2	120	-	3R	-	SEL-0651R22CXG8 AE112230XX
4	HEAVY DUTY DISTRIBUTION CLASS ARRESTER	6	HUBBELL, PDV-100 OR EQUAL	-	-	-	-	SURGE ARRESTER 27KV, 22 MCOV
5	PROJECT METER	1	ABB OR EQUAL	-	400	3R	N/A	38KV, 600A, 95KV BIL, 3PH, 60 HZ
6	SOLID-BLADE CUTOUT	3	ABB, NCX OR EQUAL	-	300	-	12KA	-
7	RISER POLE RATED - HEAVY DUTY DISTRIBUTION CLASS ARRESTER	3	HUBBELL, PDV-100 OR EQUAL	-	-	-	-	SURGE ARRESTER 27KV, 22 MCOV
8	STEP-UP XFMR	1	COOPER POWER ENVIROTRAN	-	-	-	N/A	2,500KVA, 34.5KV/19.9KV/600V/347V, Z=5.75%
9	SWITCHBOARD	1	EATON POW-R LINE C SWITCHBOARD	600	4,000	3R	35	SWITCHBOARD, 3-PHASE, 4W, 600V, 4000A, NEMA 3R, 4000A MCB
10	ZIG-ZAG GROUNDING TRANSFORMER	1	TBD	-	-	3R	-	-
11	INVERTER	40	CHINT CPS SCH125KTL-DO/US-600	600	120	4X	N/A	STRING INVERTER
12	CONTROL POWER PANEL	1	EATON P60G11S0512 OR EQUAL	1	30	3R	18	MINI-POWR ZONE WITH 5KVA XFMR
13	DAS	1	ALSO ENERGY OR EQUAL	120	-	4X	-	-
14	DC COMBINER PANEL	40	SOLARBOS OR EQUAL	1,500	400	3R	N/A	-
15	PHOTOVOLTAIC MODULE	14050	PRISM SOLAR, PST-445W-M72H	1,500	12	N/A	N/A	-

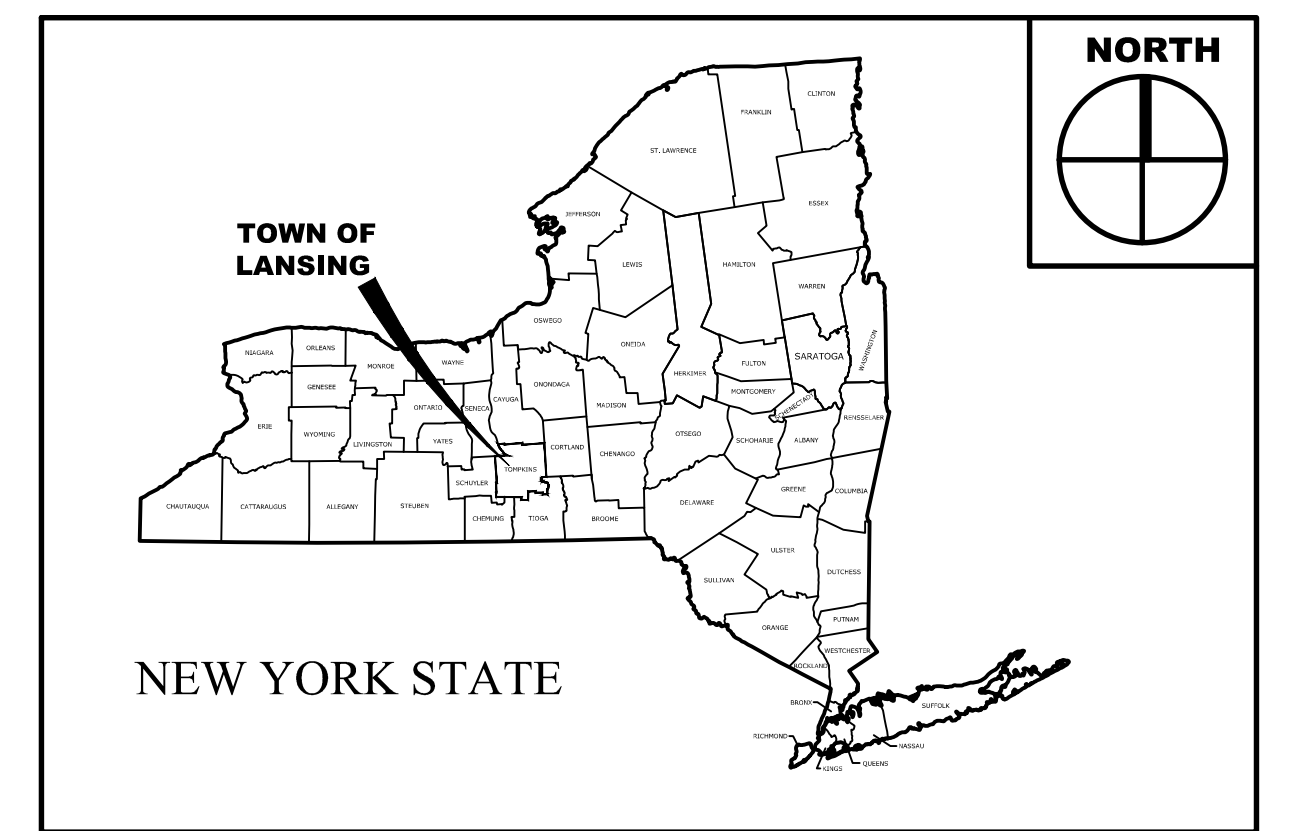
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	6/27/22	SHOW DEMARICATIONS FOR UTILITY POLES	MNE	OPW	BRG	
TOWN OF LANSING TOMPKINS COUNTY, NEW YORK						<b>ELECTRICAL SCHEDULES</b>  <b>LANSING 5MW (AC)/6.25MW(DC) PV SYSTEM</b> <b>528 LANSINGVILLE RD, LANSING NY 14882</b>
DRAFTED : MNE CHECKED : BRG PROJ. NO : 22.2303 SCALE : AS NOTED DATE : JUNE 27, 2022						<b>C.T. MALE ASSOCIATES</b> Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. 50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH: 518.786.7400 COBLESKILL, NY • GLENS FALLS, NY • POUGHKEEPSIE, NY JOHNSTOWN, NY • RED HOOK, NY • SYRACUSE, NY www.ctmale.com
						<b>E-603</b> SHEET 5 OF 5 DWG. NO: 22-230



# LANSING COMMUNITY SOLAR, LLC GENIE SOLAR ENERGY

LANSINGVILLE ROAD  
MARCH 24, 2023



**SITE LOCATION MAP**

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
C-501	SITE DETAILS	08
C-502	SITE DETAILS	09
C-503	SITE & EROSION AND SEDIMENT CONTROL DETAILS	10
C-504	EROSION AND SEDIMENT CONTROL DETAILS	11
C-701	TRAFFIC AND MAINTENANCE CONTROL DETAILS	12
C-702	TRAFFIC AND MAINTENANCE CONTROL DETAILS	13
C-703	TRAFFIC AND MAINTENANCE CONTROL DETAILS	14

### PROJECT SUMMARY

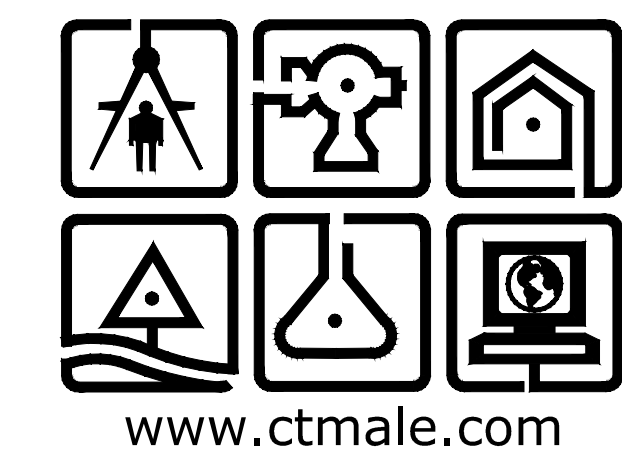
NAME PLATE RATING	6.252 MW DC / 5.0 MW AC
UTILITY TERRITORY	NYSEG
UTILITY ZONE	C
SUBSTATION	N. LANSING
CIRCUIT	4303101
DC/AC RATIO	1.25
ANNUAL PRODUCTION	8,420,030 MWh
PV MODULES	14,050 PRISM SOLAR PST-445W-M72H
INVERTERS	40 CHINT CPS SCH125KTL-DO/US-600
STRINGS PER INVERTER	25
MODULES PER STRING	14-15

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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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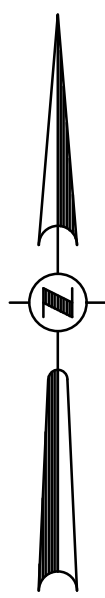
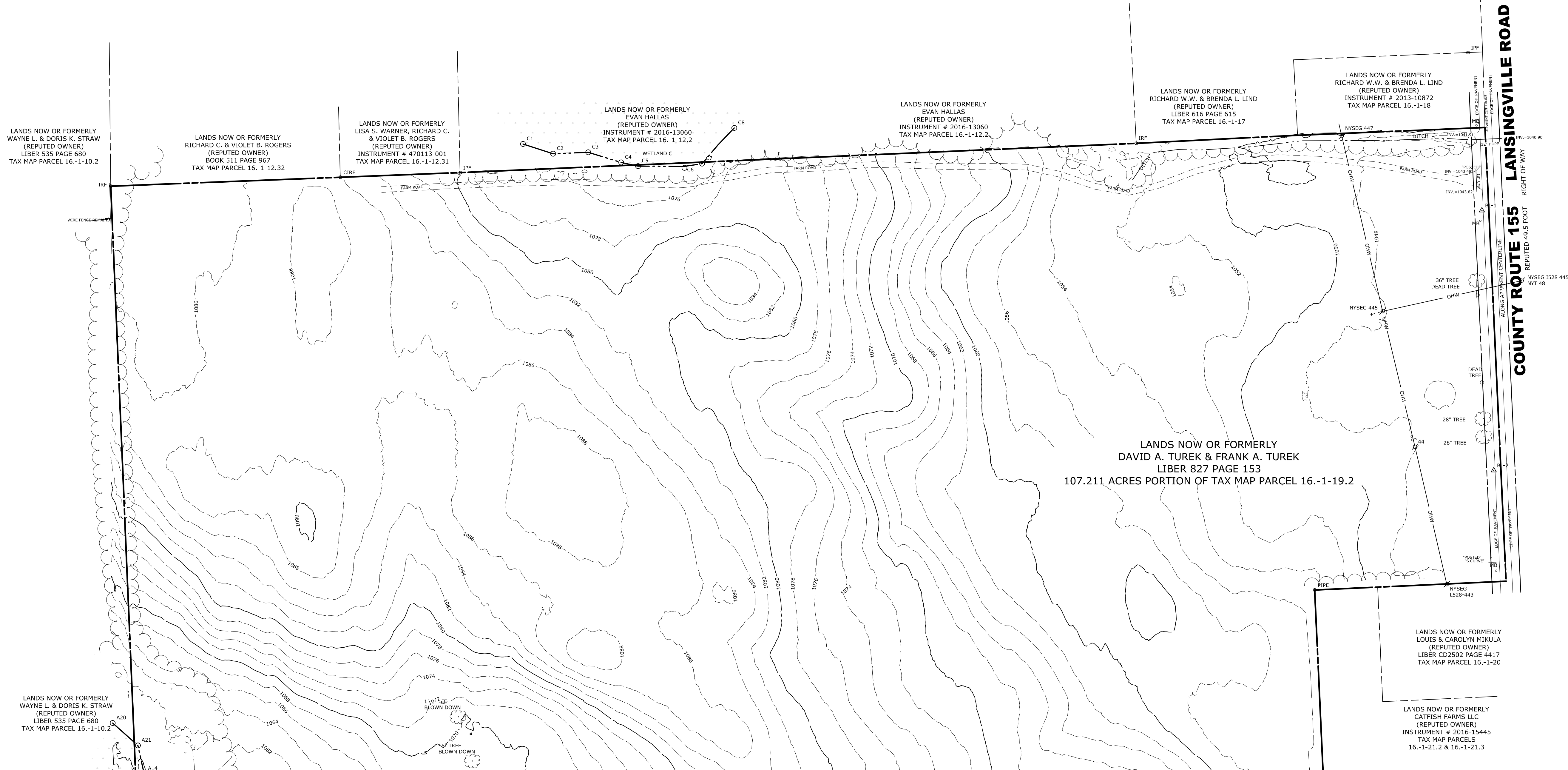


**PROJECT NO. 22.2303**  
**DRAWING NO. 23-0157**

**G-001**  
SHEET 01 OF 14

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SEE SHEET C-102

SEE SHEET C-102

LEGEND

- IRF IRON ROD FOUND
- IFF IRON PIPE FOUND
- CIRF CAPPED IRON ROD FOUND
- U UTILITY POLE
- WF WETLAND FLAG
- CMF CORRUGATED METAL PIPE
- HDPE HIGH DENSITY POLYETHYLENE PIPE
- WETLAND AREA

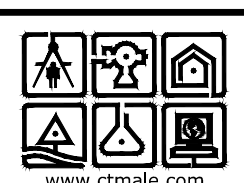
**PRELIMINARY**

**EXISTING CONDITIONS NORTH**

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GENIE SOLAR ENERGY**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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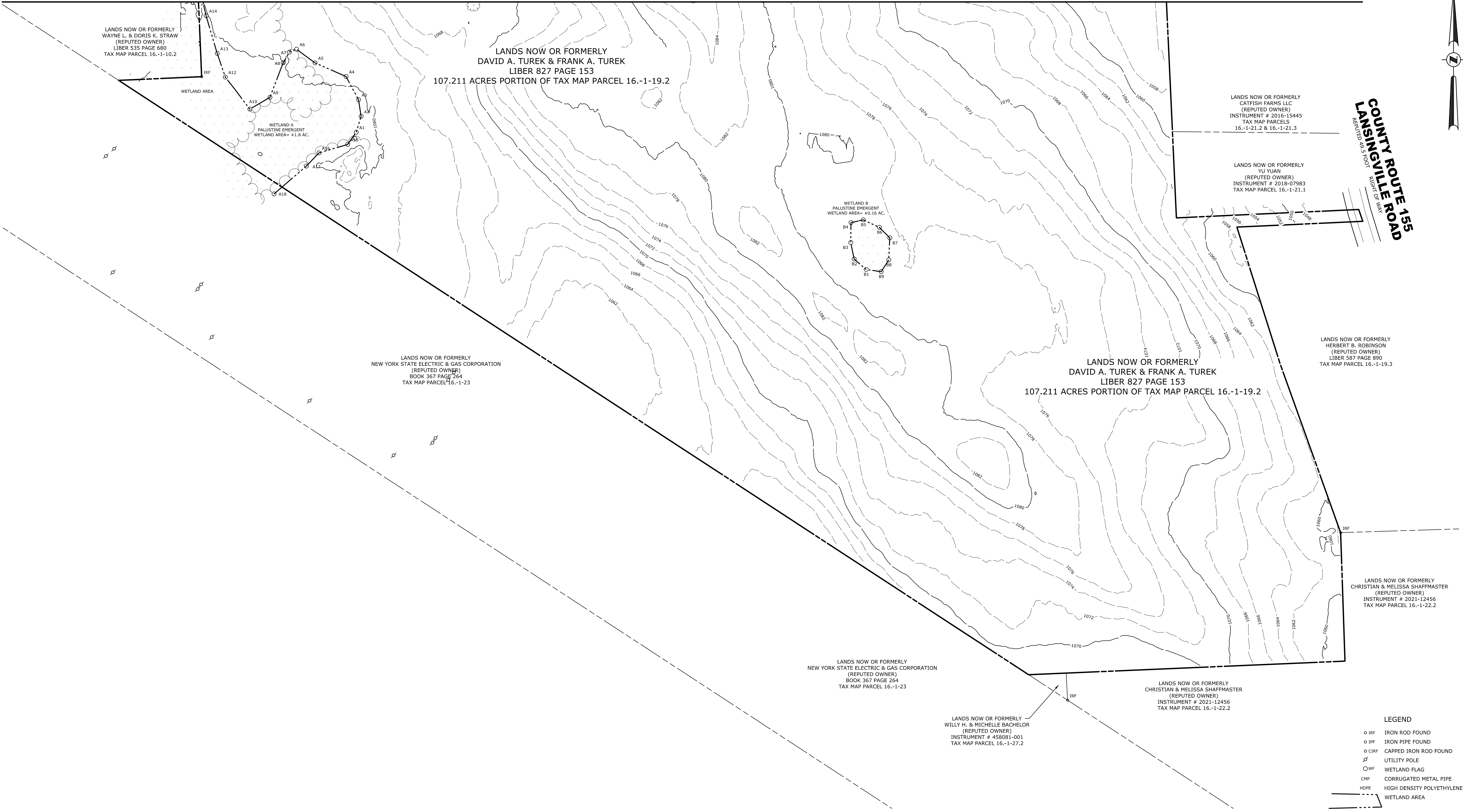
**C-101**  
SHEET 02 OF 14  
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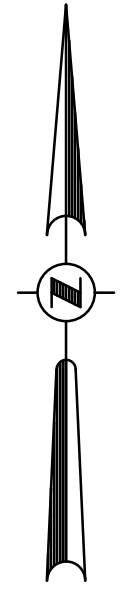


SEE SHEET C-101

SEE SHEET C-101



**COUNTY ROUTE 155**  
 49.3 FOOT RIGHT OF WAY



- LEGEND**
- IRF IRON ROD FOUND
  - IFF IRON PIPE FOUND
  - CIRF CAPPED IRON ROD FOUND
  - ♣ UTILITY POLE
  - WF WETLAND FLAG
  - CMF CORRUGATED METAL PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - WETLAND AREA

# PRELIMINARY

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**EXISTING CONDITIONS SOUTH**

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**GENIE SOLAR ENERGY**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

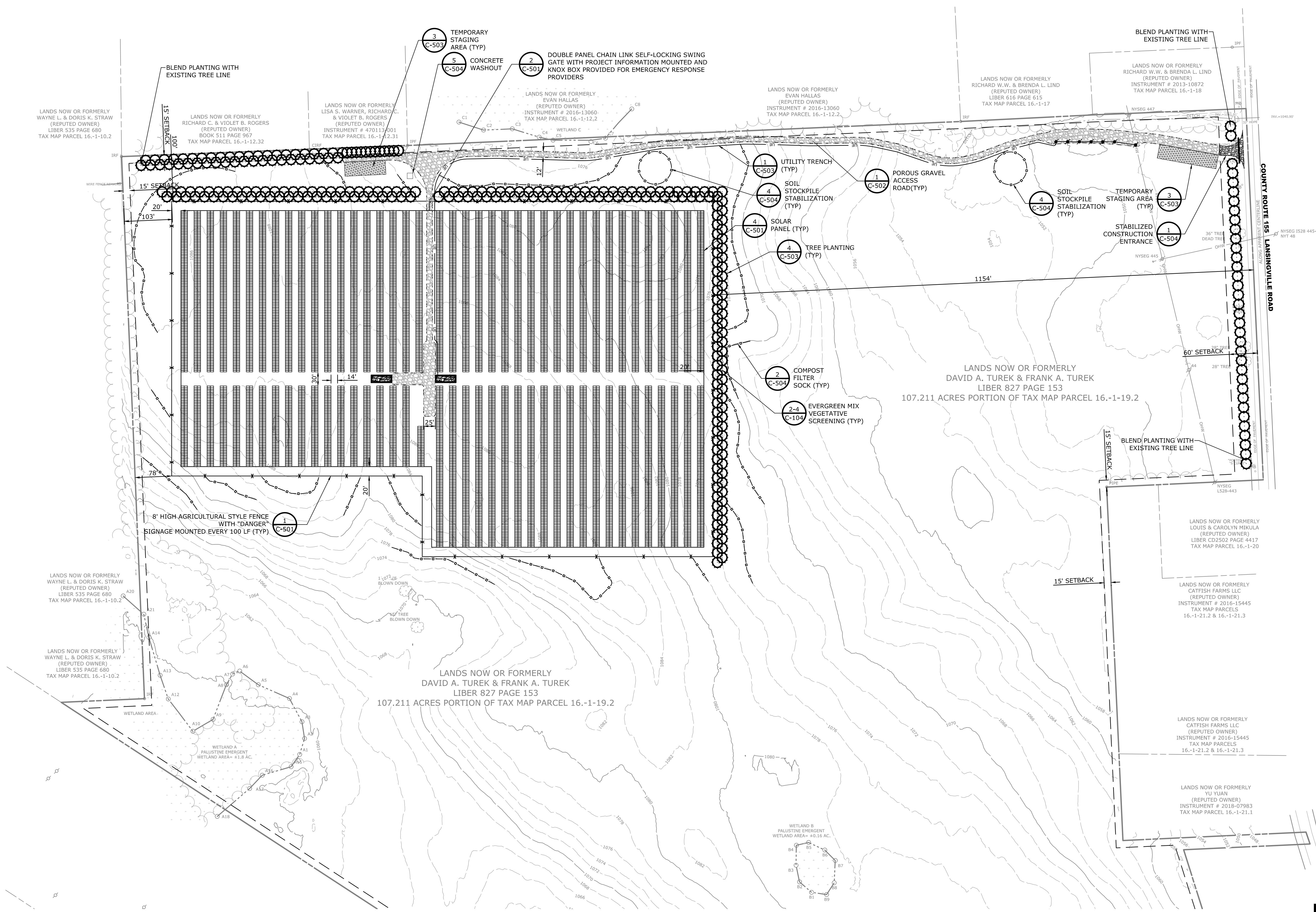
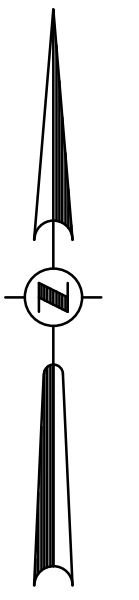
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**C-102**  
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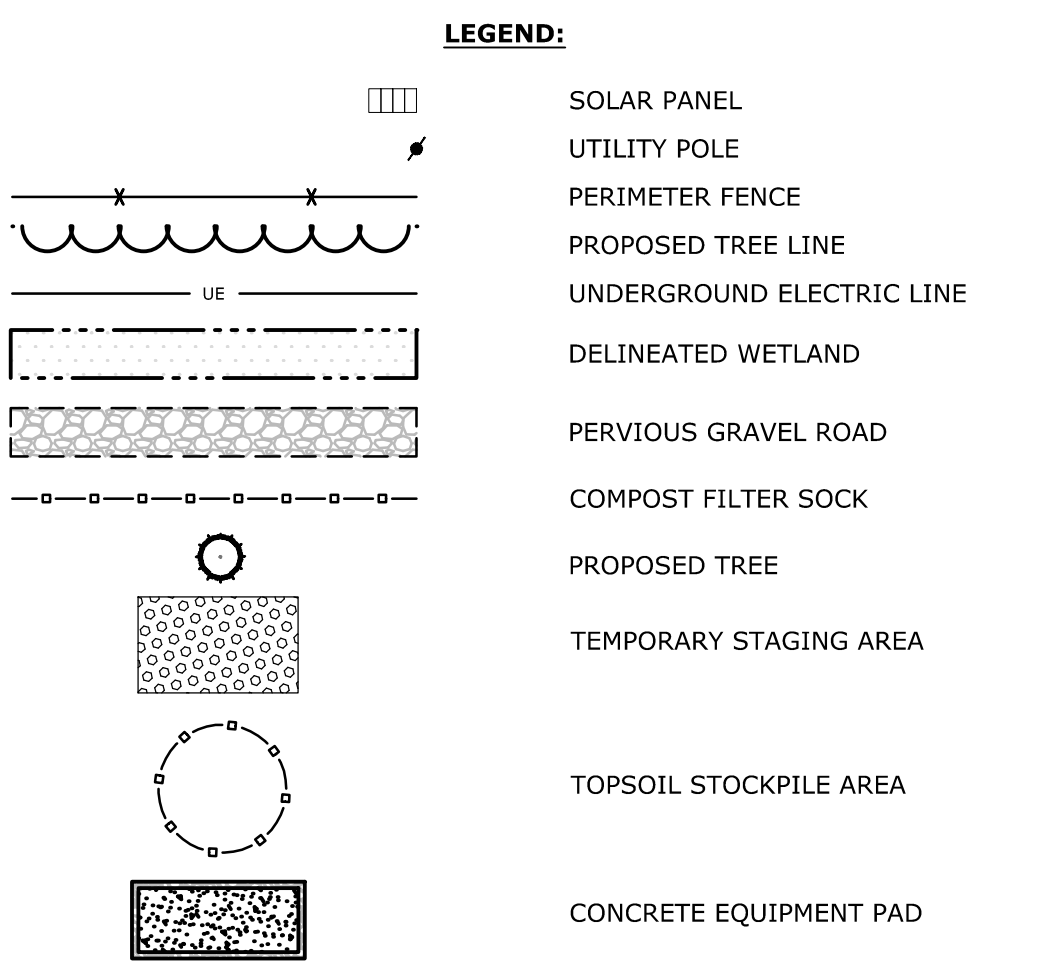


**SITE PLAN NOTES:**

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

**OVERALL SITE AND ESC PLAN**

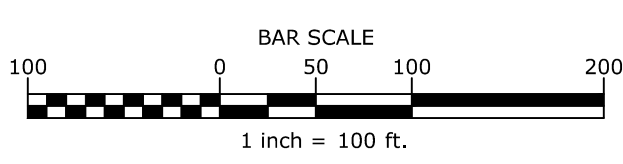
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**2 NORWAY SPRUCE**  
C-104 SCALE: NONE  
CROSS REFERENCE: NONE



**3 WHITE SPRUCE**  
C-104 SCALE: NONE  
CROSS REFERENCE: NONE



**4 EASTERN RED CEDAR**  
C-104 SCALE: NONE  
CROSS REFERENCE: NONE

**LEGEND:**

- SOLAR PANEL
- UTILITY POLE
- PERIMETER FENCE
- PROPOSED TREE LINE
- UNDERGROUND ELECTRIC LINE
- DELINEATED WETLAND
- PERVIOUS GRAVEL ROAD
- PROPOSED TREE
- CONCRETE EQUIPMENT PAD

**PLANNING SCHEDULE:**

TREE TYPE/MIX	ESTIMATED QTY.	TREE TYPE	SPACING	PLANTING HEIGHT
EVERGREEN MIX	290±	WHITE SPRUCE NORWAY SPRUCE EASTERN RED CEDAR	10' O.C.	5 FT. TO 8 FT.

NOTES:  
AN EVERGREEN MIX CONSISTING OF NORWAY SPRUCE, WHITE SPRUCE, AND EASTERN RED CEDAR WILL BE INSTALLED, AS TREES ARE AVAILABLE PRIOR TO CONSTRUCTION.



**1 LANDSCAPING PLAN**  
C-104 SCALE: 1" = 100'  
CROSS REFERENCE: NONE

**PRELIMINARY**

**LANDSCAPING PLAN**

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

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

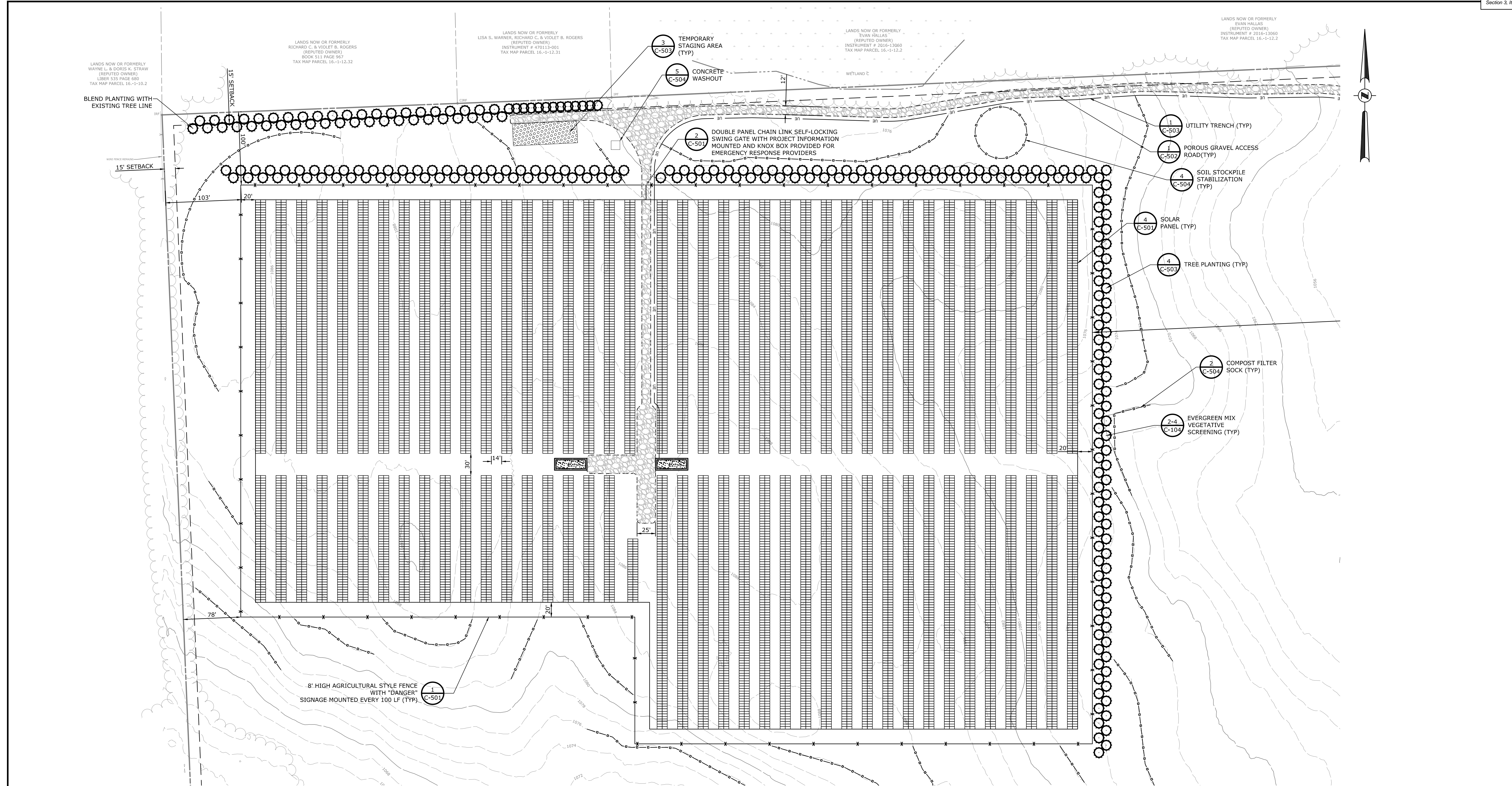
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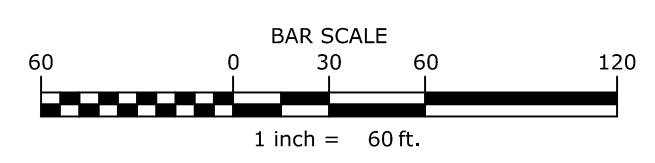
- SOLAR PANEL
- UTILITY POLE
- PERIMETER FENCE
- PROPOSED TREE LINE
- UNDERGROUND ELECTRIC LINE
- DELINEATED WETLAND
- PERVIOUS GRAVEL ROAD
- COMPOST FILTER SOCK
- PROPOSED TREE
- TEMPORARY STAGING AREA
- TOPSOIL STOCKPILE AREA
- CONCRETE EQUIPMENT PAD

**SITE PLAN NOTES:**

ZONING DISTRICT: (RA) RESIDENTIAL AGRICULTURE  
 TAX MAP I.D.: 16.-1-19.2  
 TOTAL PARCEL SIZE: 107.2± AC  
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 PROPOSED AREA OF DISTURBANCE: 22.67± AC  
 NEW GRAVEL ACCESS ROAD: 2,575± LF, 40,771± SQ. FT.  
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**ZONING ANALYSIS:**

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MIN. SIDE YARD SETBACK	15 FT.	100± FT.
MIN. REAR YARD SETBACK	15 FT.	78± FT.
MAX LOT COVERAGE	NONE	7.2± %



**PRELIMINARY**

**SOLAR ARRAY & ESC PLAN**

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

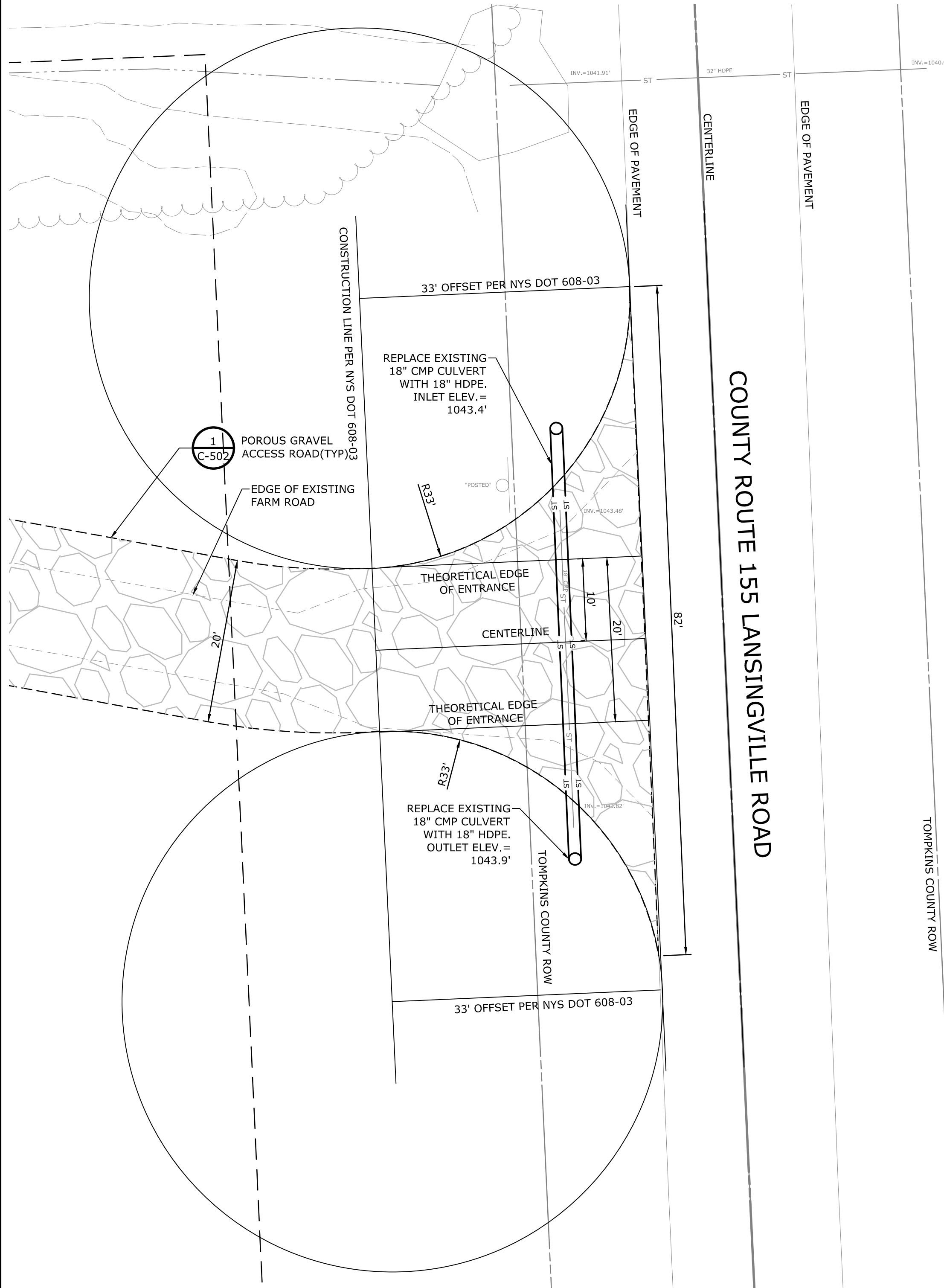
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**C-105**  
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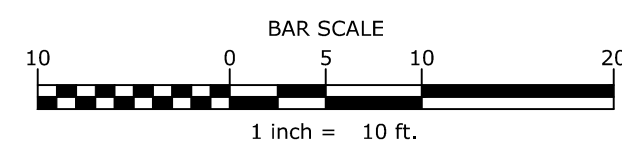
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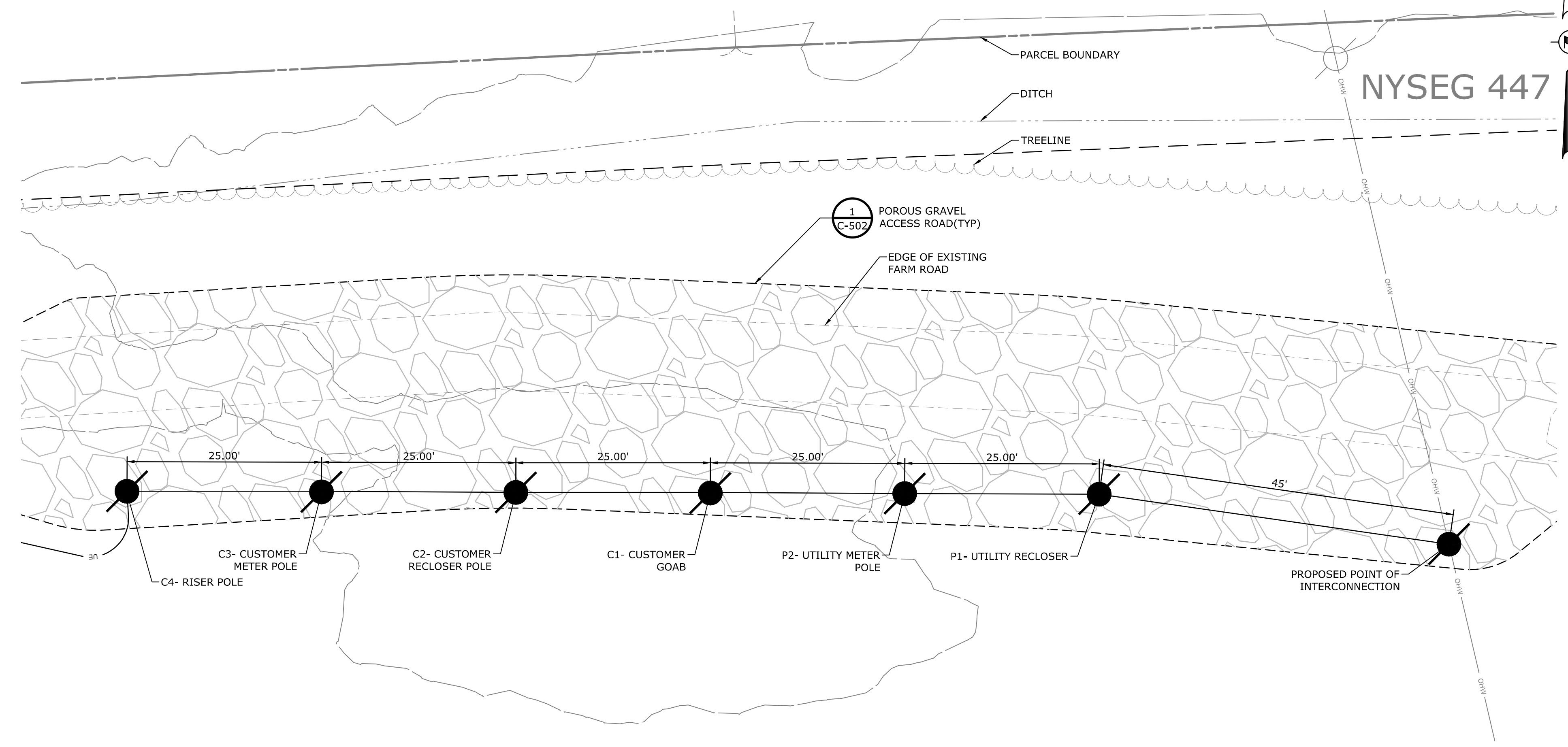
**1 ENTRANCE PLAN**  
 C-106 SCALE: 1" = 10'  
 CROSS REFERENCE: NONE



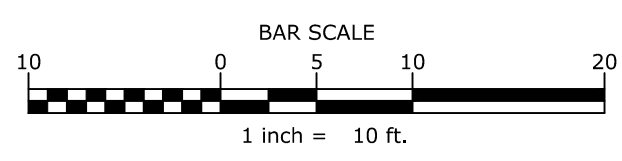
**LEGEND:**

- 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 DISTANCE LEFT @42" = ±830'  
 SITE DISTANCE RIGHT @42" = ±1,285'  
 SITE DISTANCE LEFT @24" = ±830'  
 SITE DISTANCE RIGHT @24" = ±1,285'  
 JERRY SMITH ROAD TO PROPOSED ENTRANCE = ±660'  
 EXISTING DRIVEWAY TO PROPOSED ENTRANCE WEST SIDE OF LANSINGVILLE ROAD = ±185'  
 EXISTING DRIVEWAY TO PROPOSED ENTRANCE EAST SIDE OF LANSINGVILLE ROAD = ±60'



**2 UTILITY POLE PLAN**  
 C-106 SCALE: 1" = 10'  
 CROSS REFERENCE: NONE



**PRELIMINARY**

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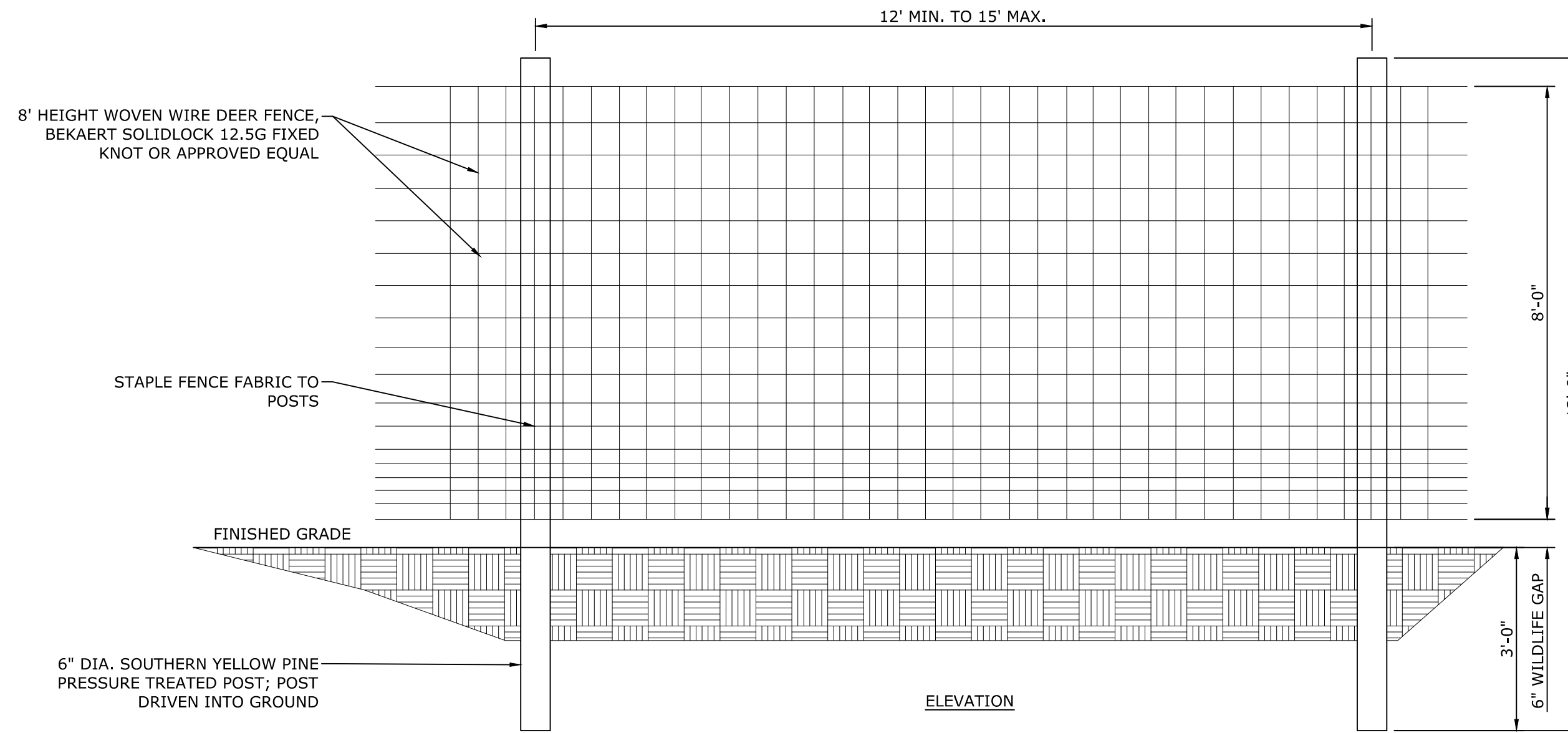
<b>ENTRANCE AND UTILITY POLE PLAN</b>	
<b>LANSING COMMUNITY SOLAR, LLC</b> <b>GENIE SOLAR ENERGY</b>	
TOWN OF LANSING	TOMPKINS COUNTY, NEW YORK
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<b>C-106</b>	SHEET 07 OF 14
DWG. NO: 23-015	

**GENERAL NOTES:**

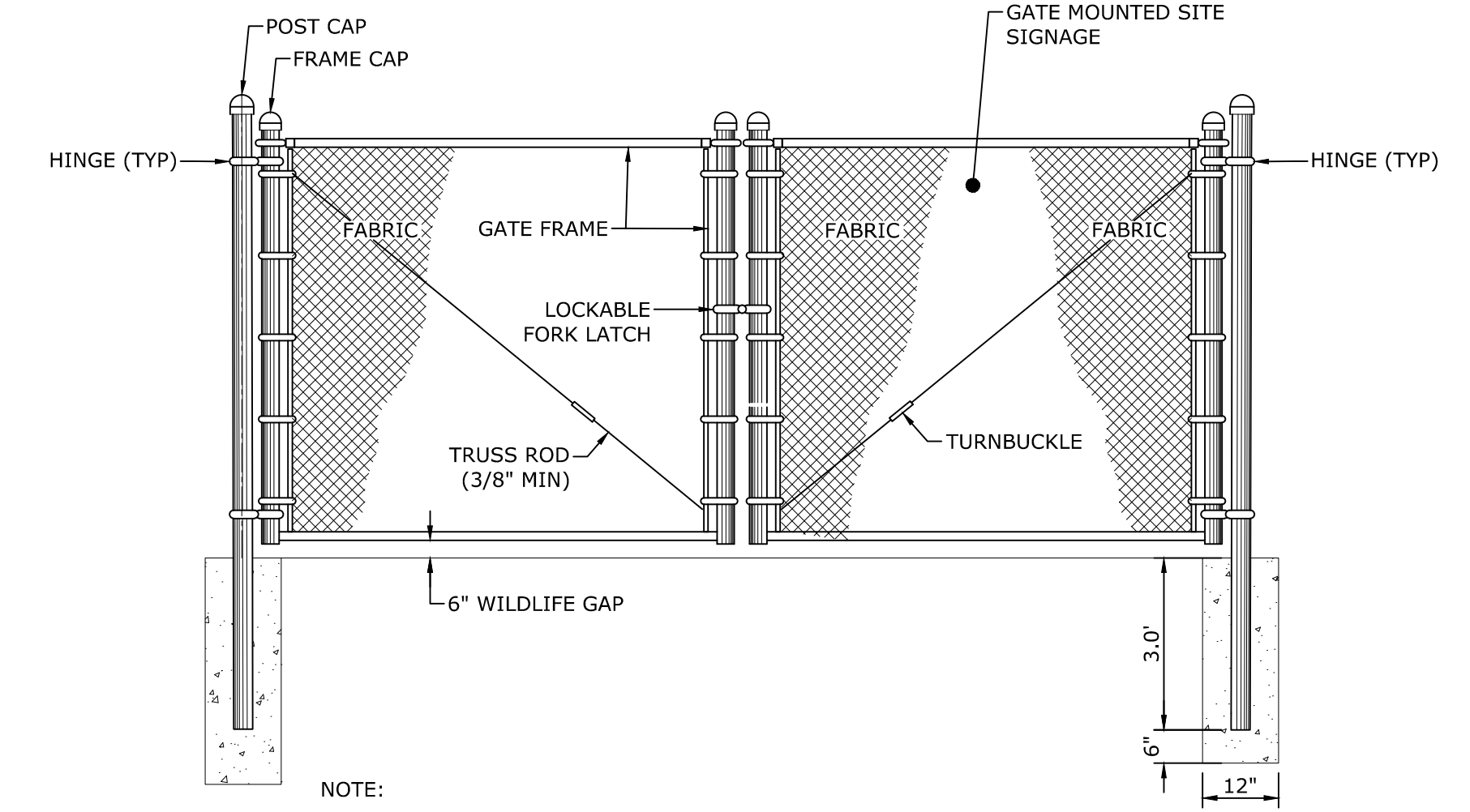
- BEFORE UNDERTAKING ANY CONSTRUCTION ACTIVITY, ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH SITE WORK THAT INVOLVES PHYSICAL GROUND DISTURBANCE ON THE PROJECT SITE SHALL SIGN AND DATE A COPY OF THE CERTIFICATION STATEMENT, WHICH IS LOCATED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), PREPARED FOR THIS PROJECT.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL CONFORM TO THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" (2016 ISSUE) AND ANY ADDENDA THERETO.
- THE SEDIMENT CONTROL MEASURES DETAILED IN THESE PLANS SHALL BE IN PLACE PRIOR TO THE START OF EACH CONSTRUCTION PHASE. ONCE CONSTRUCTED, ALL MEASURES SHALL BE PROPERLY MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD, AND THEN REMOVED FROM THE SITE ONCE THE SITE IS STABILIZED.
- AFTER THE START OF CONSTRUCTION, SITE SWPPP INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY (7) CALENDAR DAYS.
- BASED ON THE WEEKLY SITE SWPPP INSPECTIONS, THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWPPP MAY BE REVISED AS SITE CONDITIONS WARRANT. THE CONTRACTOR SHALL IMPLEMENT THESE CHANGES AS SOON AS PRACTICABLE. AND KEEP AND UPDATED SWPPP ONSITE.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FINAL SURFACE TREATMENT HAS BEEN INSTALLED AND VEGETATED AREAS HAVE ESTABLISHED 80% COVERAGE. AFTER THE VEGETATED AREAS HAVE BEEN STABILIZED WITH AT LEAST 80% VEGETATIVE COVER, AS DETERMINED BY THE ENGINEER, THE PROJECT SPONSOR SHALL ASSUME RESPONSIBILITY FOR MAINTAINING THE EROSION AND SEDIMENT CONTROL SYSTEM(S).
- THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE CONTRACT DOCUMENTS WILL NEED TO BE SUPPLEMENTED WITH INTERIM MEASURES PRIOR TO ACHIEVING FINAL GRADES. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN INTERIM EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED TO CONTROL EROSION AND SEDIMENTATION THROUGHOUT THE DURATION OF CONSTRUCTION. THE DETAILS AND EXTENT OF THESE MEASURES ARE HIGHLY DEPENDENT ON THE CONTRACTORS MEANS AND METHODS AND THEREFORE NOT DETAILED ON THESE PLANS. THE COSTS ASSOCIATED WITH INSTALLING AND MAINTAINING THESE INTERIM MEASURES SHALL BE INCLUDED IN THE CONTRACTORS BID.
- CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCING NOTES.
- OUTSIDE THE GROWING SEASON, OTHER METHODS OF SOIL STABILIZATION (SUCH AS THE USE OF JUTE MESH, EXCELSIOR MATTING, OR TACKIFIER) SHALL BE USED UNTIL SUCH TIME AS VEGETATIVE COVER CAN BE ESTABLISHED.
- EXISTING VEGETATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE. SITE WORK ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE AREA AND DURATION OF SOIL DISTURBANCE. REMOVAL OF WOODY VEGETATION SHALL BE KEPT TO THE MINIMUM EXTENT PRACTICABLE.

**GRADING PLAN NOTES:**

- THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS HAVING UNDERGROUND UTILITIES ON-SITE OR IN THE RIGHT-OF-WAY THAT MAY BE AFFECTED BY THE WORK, PRIOR TO EXCAVATING AND SITE GRADING.
- SITE GRADING SHALL NOT PROCEED UNTIL APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE PATTERNS DURING THE COURSE OF THE WORK.
- EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. IN THE EVENT THAT WORK OUTSIDE OF DESIGNATED LIMITS IS NECESSARY, THE PERMISSION OF THE PROPERTY OWNER MUST FIRST BE OBTAINED BEFORE COMMENCING SUCH WORK.
- BOX TREES, SHRUBS, AND HEDGES TO REMAIN BEFORE PLACING EARTH AGAINST OR NEAR THEM. SHRUBS AND HEDGES, WHICH MUST BE REMOVED TO PERFORM THE WORK, SHALL BE HEALED IN AND REPLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES INTENDED TO REMAIN SHALL BE REPLACED IN SIMILAR SIZE AND SPECIES AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING, BARRICADES, OR OTHER SUITABLE PROTECTION LOCATED OUTSIDE THE DRIP LINE (OUTER PERIMETER OF BRANCHES) TO PROTECT TREES AND OTHER PLANTS INTENDED TO REMAIN FROM DAMAGE.

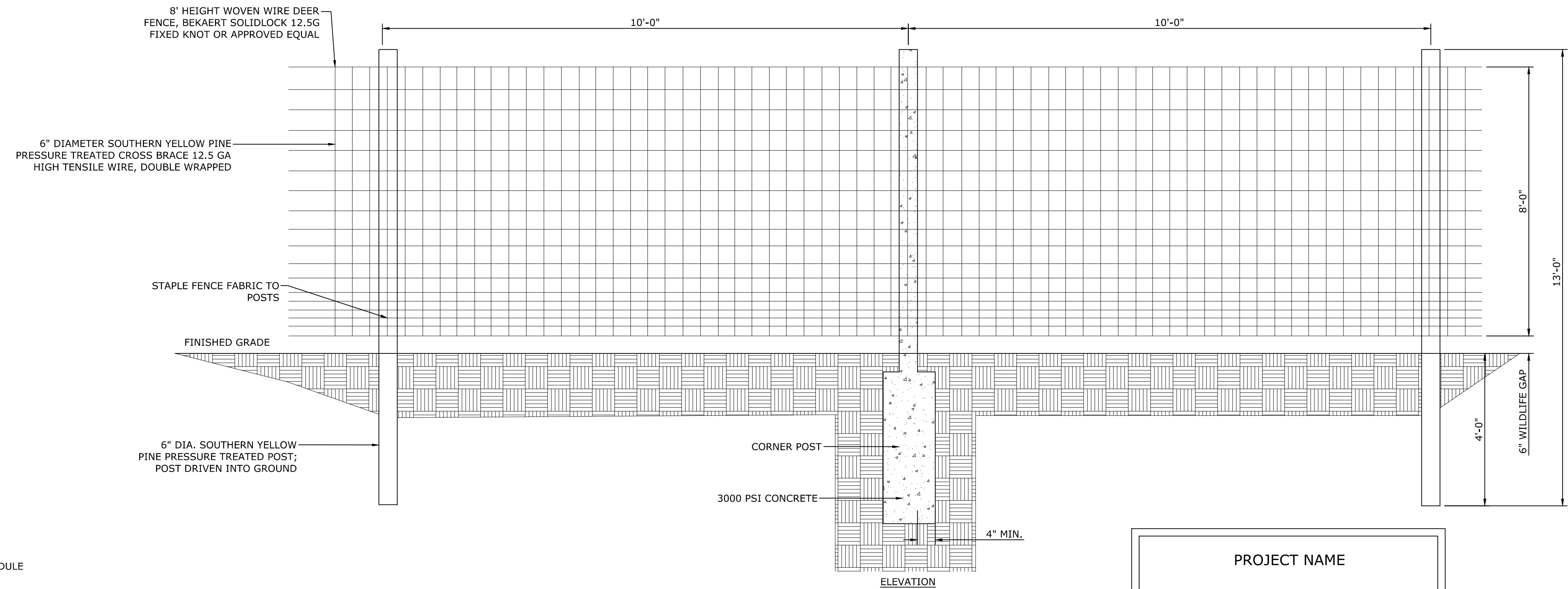


**1 PERIMETER FENCE**  
SCALE: NONE  
CROSS REFERENCE: NONE



**2 DOUBLE PANEL SWING GATE**  
SCALE: NONE  
CROSS REFERENCE: NONE

NOTE:  
1. PERIMETER GATE SECURED FOR RESTRICTED ACCESS MUST BE EQUIPPED WITH AN EMERGENCY SERVICES RAPID ENTRY SYSTEM. PROVIDE KNOX EXTERIOR PADLOCK. KNOX PADLOCK SHALL BE DAISY CHAINED WITH OWNER PROVIDED PADLOCK(S)



**3 FENCE CORNER POST**  
SCALE: NONE  
CROSS REFERENCE: NONE

**PROJECT NAME**

PROJECT OWNER  
OWNER PHONE NUMBER

UTILITY NAME  
UTILITY PHONE NUMBER

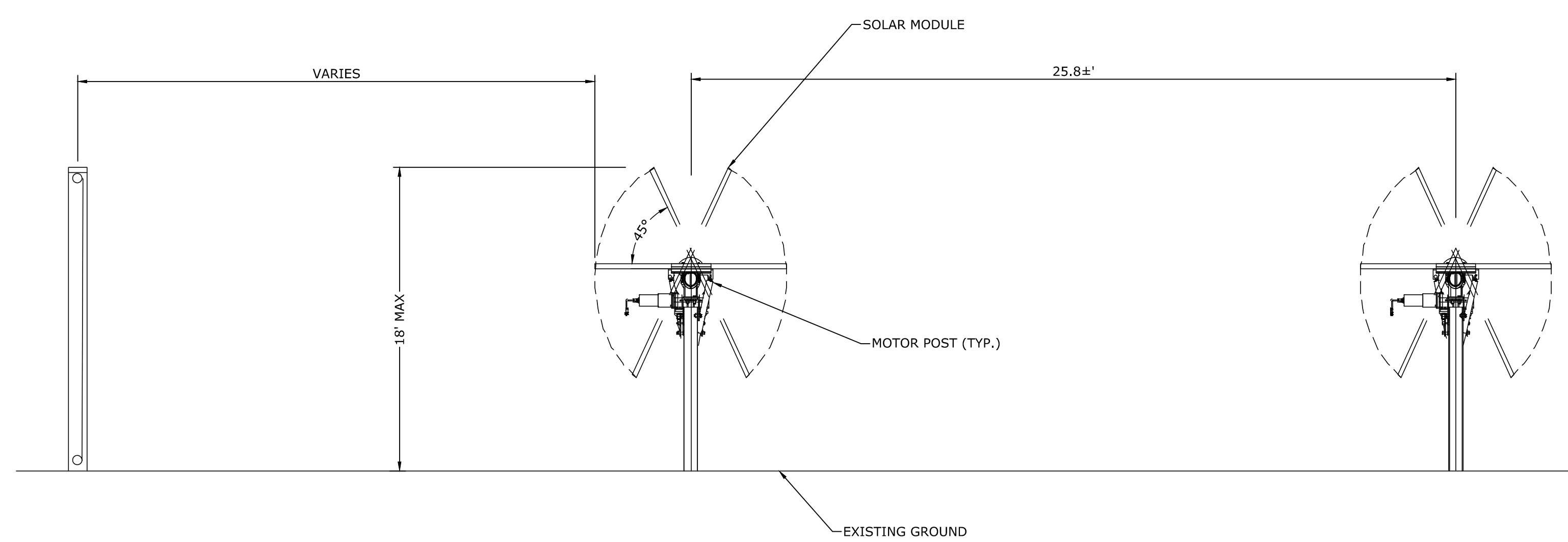
PROJECT VOLTAGE  
NO TRESPASSING

- NOTES:
- SIGN TO BE STAINLESS STEEL OR APPROVED EQUIVALENT AND INSTALLED ON APPROPRIATE METAL POSTS.
  - SIGN SHALL NOT EXCEED 8 SQUARE FEET.
  - SIGN SHALL BE OF WHITE BACKGROUND WITH BLACK OR DARK LETTERING WITH A NEAT LINE BORDER.

**6 PROJECT SIGNAGE**  
SCALE: NONE  
CROSS REFERENCE: NONE



**5 SIGNAGE DETAIL**  
SCALE: NONE  
CROSS REFERENCE: NONE



**4 TYPICAL ARRAY SECTION**  
SCALE: NONE  
CROSS REFERENCE: NONE

**PRELIMINARY**

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.

OWEN K. SPEULSTRA P.E. NO. 104125	DESIGNER: MLS	<b>SITE DETAILS</b>  <b>LANSING COMMUNITY SOLAR, LLC</b> <b>GENIE SOLAR ENERGY</b>  TOWN OF LANSING TOMPKINS COUNTY, NEW YORK  <b>C.T. MALE ASSOCIATES</b> 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
	DRAFTED : MLS	
	CHECKED : OKS	
	PROJ. NO : 22.2303	
	SCALE : AS NOTED	
	DATE : MARCH 24, 2023	

<b>C-501</b>	<b>SHEET 08 OF 14</b>
<b>DWG. NO: 23-015</b>	113

CAD DWG. FILE NAME: K:\Projects\222303\Civil\00\_Drawings and Maps\C-501.dwg



**NOTES FOR PERVIOUS ACCESS ROADS:**

- USE OF THIS DETAIL/CRITERION IS LIMITED TO ACCESS ROADS USED ON AN OCCASIONAL BASIS ONLY (I.E. PROVIDE ACCESS FOR MOWING, EQUIPMENT REPAIR OR MAINTENANCE, ETC.).
- LIMITED USE PERVIOUS ACCESS ROAD IS LIMITED TO LOW IMPACT IRREGULAR MAINTENANCE ACCESS ASSOCIATED WITH RENEWABLE ENERGY PROJECTS IN NEW YORK STATE.
- REMOVE STUMPS, ROCKS AND DEBRIS AS NECESSARY. FILL VOIDS TO MATCH EXISTING NATIVE SOILS AND COMPACTION LEVEL.
- REMOVED TOPSOIL MAY BE SPREAD IN ADJACENT AREAS AS DIRECTED BY THE PROJECT ENGINEER. COMPACT TO THE DEGREE OF THE NATIVE INSITU SOIL. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
- GRADE ROADWAY, WHERE NECESSARY, TO NATIVE SOIL AND DESIRED ELEVATION. MINOR GRADING FOR CROSS SLOPE CUT AND FILL MAY BE REQUIRED.
- REMOVE REFUSE SOILS AS DIRECTED BY THE PROJECT ENGINEER. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
- ROADWAY WIDTH TO BE DETERMINED BY CLIENT.
- THE LIMITED USE PERVIOUS ACCESS ROAD CROSS SLOPE SHALL BE 2% IN MOST CASES AND SHOULD NOT EXCEED 6%. THE LONGITUDINAL SLOPE OF THE ACCESS DRIVE SHOULD NOT EXCEED 15%.
- LIMITED USE PERVIOUS ACCESS ROAD IS NOT INTENDED TO BE UTILIZED FOR CONSTRUCTION WHICH MAY SUBJECT THE ACCESS TO SEDIMENT TRACKING. THE PERVIOUS ACCESS ROAD SHALL BE PROTECTED DURING CONSTRUCTION BY PLACING A GEOTEXTILE (MIRAFI 140N OR APPROVED EQUIVALENT) ON THE SURFACE OF THE PERVIOUS ROAD FOLLOWED BY 3'-4" OF GRAVEL OR NYSDOT CRUSHER RUN.
- TO ENSURE THAT SOIL IS NOT TRACKED ONTO THE LIMITED USE PERVIOUS ACCESS ROAD, IT SHALL NOT BE USED BY CONSTRUCTION VEHICLES TRANSPORTING SOIL, FILL MATERIAL, ETC. IF THE LIMITED USE PERVIOUS ACCESS IS COMPLETED DURING THE INITIAL PHASES OF CONSTRUCTION, A STANDARD NEW YORK STATE STABILIZED CONSTRUCTION ACCESS SHALL BE CONSTRUCTED AND UTILIZED TO REMOVE SEDIMENT FROM CONSTRUCTION VEHICLES AND EQUIPMENT PRIOR TO ENTERING THE LIMITED USE PERVIOUS ACCESS ROAD FROM ANY LOCATION ON, OR OFF SITE. MAINTENANCE OF THE PERVIOUS ACCESS ROAD WILL BE REQUIRED IF SEDIMENT IS OBSERVED WITHIN THE CLEAN STONE.
- THE LIMITED USE PERVIOUS ACCESS ROAD SHALL NOT BE CONSTRUCTED OR USED UNTIL ALL AREAS SUBJECT TO RUNOFF ONTO THE PERVIOUS ACCESS HAVE ACHIEVED FINAL STABILIZATION.
- PROJECTS SHOULD AVOID INSTALLATION OF THE LIMITED USE PERVIOUS ACCESS ROAD IN POORLY DRAINED AREAS, HOWEVER IF NO ALTERNATIVE LOCATION IS AVAILABLE, THE PROJECT SHALL UTILIZE WOVEN GEOTEXTILE MATERIAL AS DETAILED IN FOLLOWING NOTES.
- THE DRAINAGE DITCH IS OFFERED IN THE DETAIL FOR CIRCUMSTANCES WHEN CONCENTRATED FLOW COULD NOT BE AVOIDED. THE INTENTION OF THIS DESIGN IS TO MINIMIZE ALTERATIONS TO HYDROLOGY, HOWEVER WHEN DEALING WITH 5%-15% GRADES NOT PARALLEL TO THE CONTOUR, A ROADSIDE DITCH MAY BE REQUIRED. THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED WATERWAYS AND VEGETATED WATERWAYS ARE APPLICABLE FOR SIZING AND STABILIZATION. DIMENSIONS FOR THE GRASSED WATERWAY SPECIFICATION WOULD BE DESIGNED FOR PROJECT SPECIFIC HYDROLOGIC RUNOFF CALCULATIONS, AND A SEPARATE DETAIL FOR THE SPECIFIC GRASSED WATERWAY WOULD BE INCLUDED IN THIS PRACTICE. RUNOFF DISCHARGES WILL BE SUBJECT TO THE OUTLET REQUIREMENTS OF THE REFERENCED STANDARD. INCREASED POST-DEVELOPMENT RUNOFF FROM THE ASSOCIATED ROADSIDE DITCH MAY REQUIRE ADDITIONAL PRACTICES TO ATTENUATE RUNOFF TO PRE-DEVELOPMENT CONDITIONS.
- A HYDROLOGIC ANALYSIS OF THE ARRAY SITE HAS BEEN PERFORMED AND THE RESULTS SHOW THAT THE HYDROLOGY HAS NOT BEEN ALTERED FROM THE PRE- TO POST-DEVELOPMENT CONDITIONS AS DEFINED IN APPENDIX A OF GP-0-20-001. THE SUPPORTING CALCULATIONS FOR THIS ANALYSIS ARE INCLUDED IN THE SEPARATELY BOUND SWPPP PREPARED FOR THIS PROJECT.
- AT THE COMPLETION OF ARRAY INSTALLATION THE UPPER 3"-4" OF GRAVEL WEARING SURFACE SHALL BE REMOVED ALONG WITH THE MIRAFI 140N EXPOSING THE PROTECTED PERVIOUS ROAD SECTION

**GEOGRID MATERIAL NOTES:**

- THE GEOGRID, OR COMPARABLE PRODUCT, IS INTENDED FOR USE FOR ALL CONDITIONS, IN ORDER TO ASSIST IN MATERIAL SEPARATION FROM NATIVE SOILS AND PRESERVE ACCESS LOADS.
- GRAVEL FILL MATERIAL SHALL CONSIST OF 1-4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
- GEOGRID SHALL BE MIRAFI BXG110 OR APPROVED EQUAL. GEOGRID SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
- IF MORE THAN ONE ROLL WIDTH IS REQUIRED, ROLLS SHOULD OVERLAP A MINIMUM OF SIX INCHES.
- REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER TYING AND CONNECTIONS.
- LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1-4" CRUSHED STONE MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.

**BASIS OF DESIGN:** TENCATE MIRAFI BXG110 GEOGRIDS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

**GEOWEB MATERIAL NOTES:**

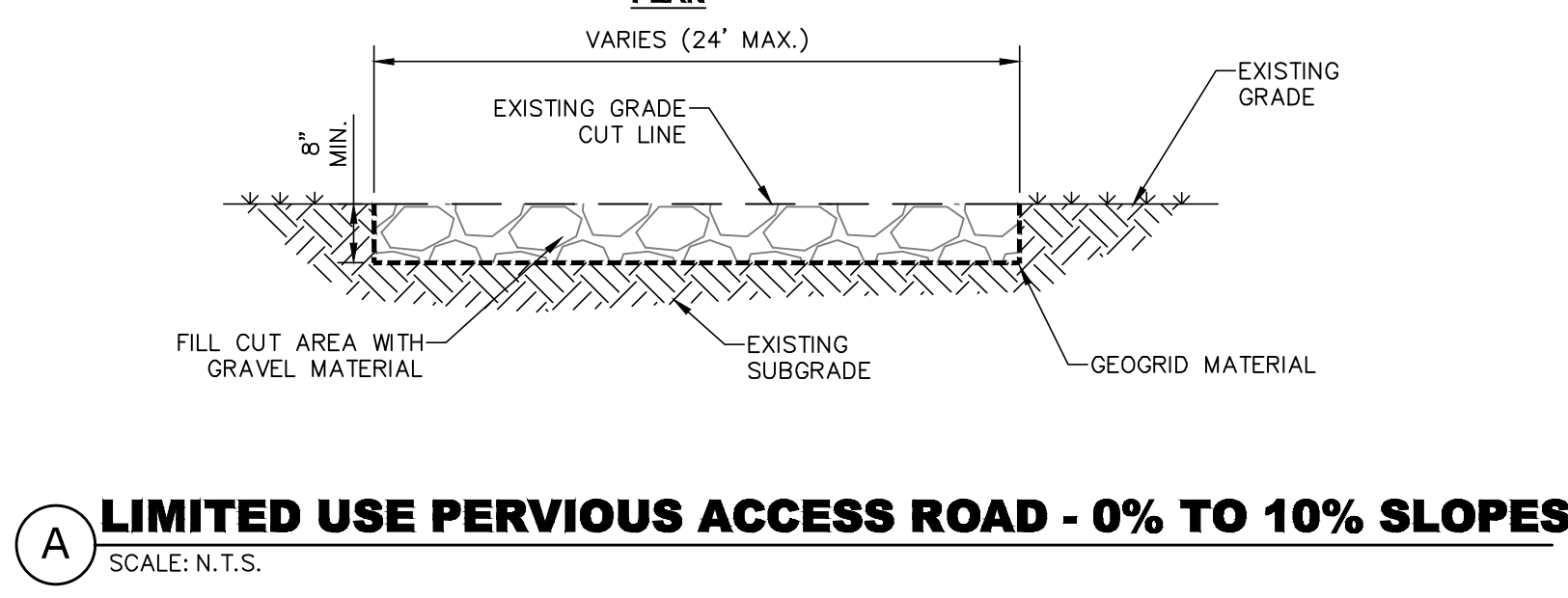
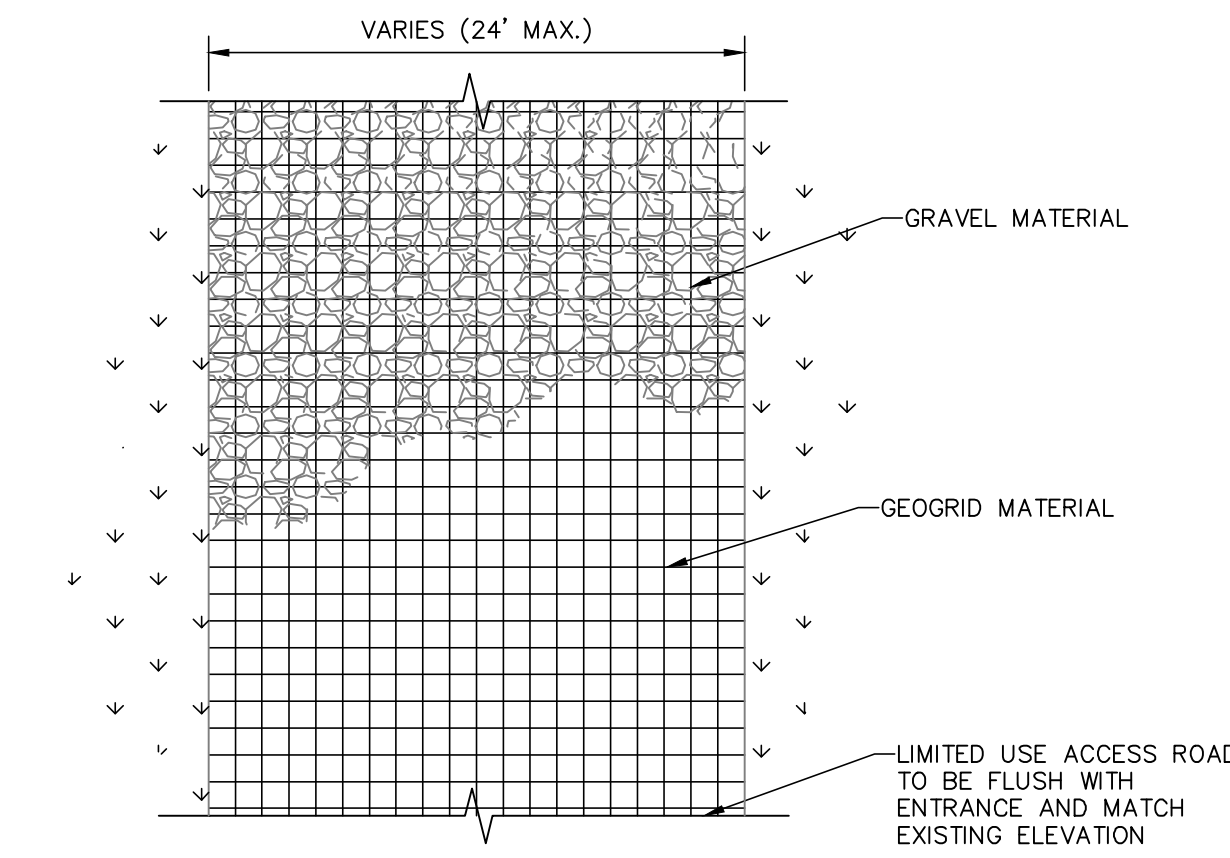
- THE GEOWEB, OR COMPARABLE PRODUCT, IS SUGGESTED FOR USE ON ROAD PROFILES EXCEEDING 10%. THE GEOWEB PRODUCT IS INTENDED TO LIMIT SHIFTING STONE MATERIAL DURING USE.
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- WHERE REQUIRED, A NATIVE SOIL WEDGE SHALL BE PLACED TO ACCOMMODATE ROAD CROSS SLOPE OF 2%. NATIVE SOIL SHALL BE COMPACTED TO MATCH EXISTING SOIL CONDITIONS.
- GRAVEL FILL MATERIAL SHALL CONSIST OF 1-4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
- GEOWEB SYSTEM SHALL BE PRESTO GEOSYSTEMS GEOWEB OR APPROVED EQUAL. GEOWEB SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
- LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1-4" CRUSHED STONE, SIZE 3A, MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.
- THE TOP EDGES OF ADJACENT CELL WALLS SHALL BE FLUSH WHEN CONNECTING. ALIGN THE I-SLOTS FOR INTERLEAF AND END TO END CONNECTIONS. THE GEOWEB PANELS SHALL BE CONNECTED WITH ATRA KEYS AT EACH INTERLEAF AND END TO END CONNECTIONS. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER INSTALLATION, TYING AND CONNECTIONS.

**BASIS OF DESIGN:** PRESTO GEOSYSTEMS GEOWEB; 670 NORTH PERKINS STREET, APPLETON, WI; 800-548-3424 OR 920-738-1222; INFO@PRESTOGEO.COM; WWW.PRESTOGEO.COM

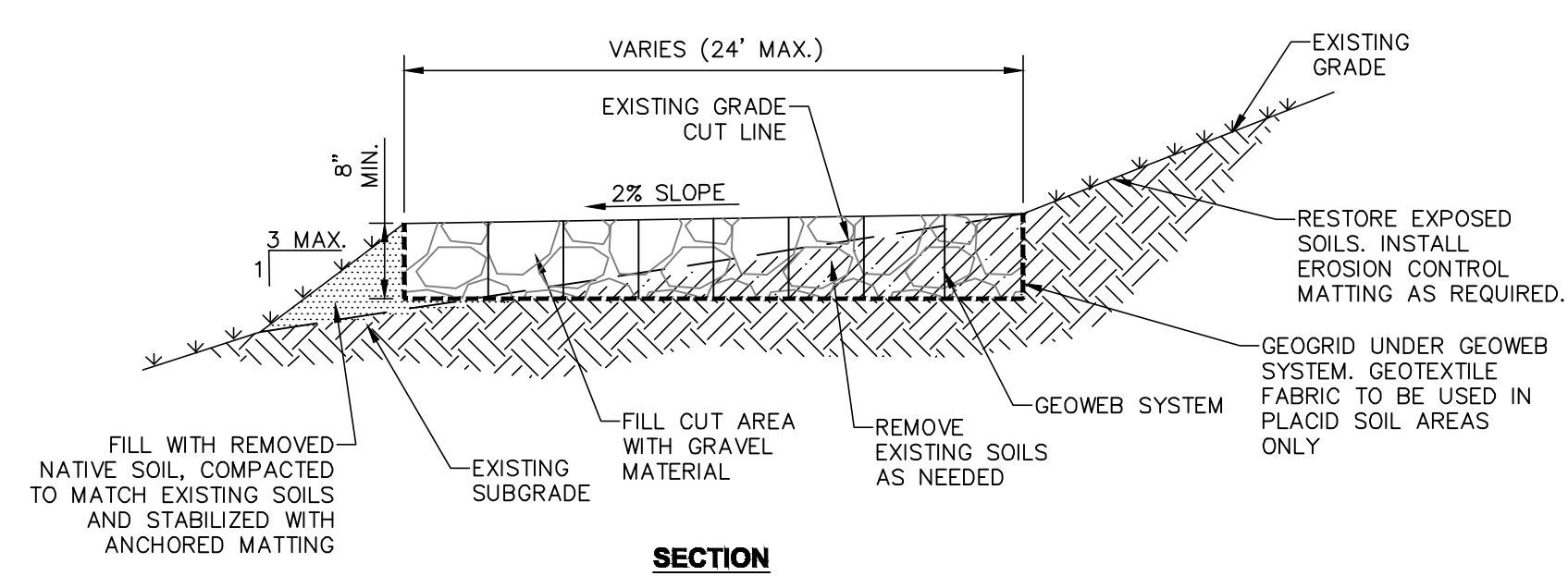
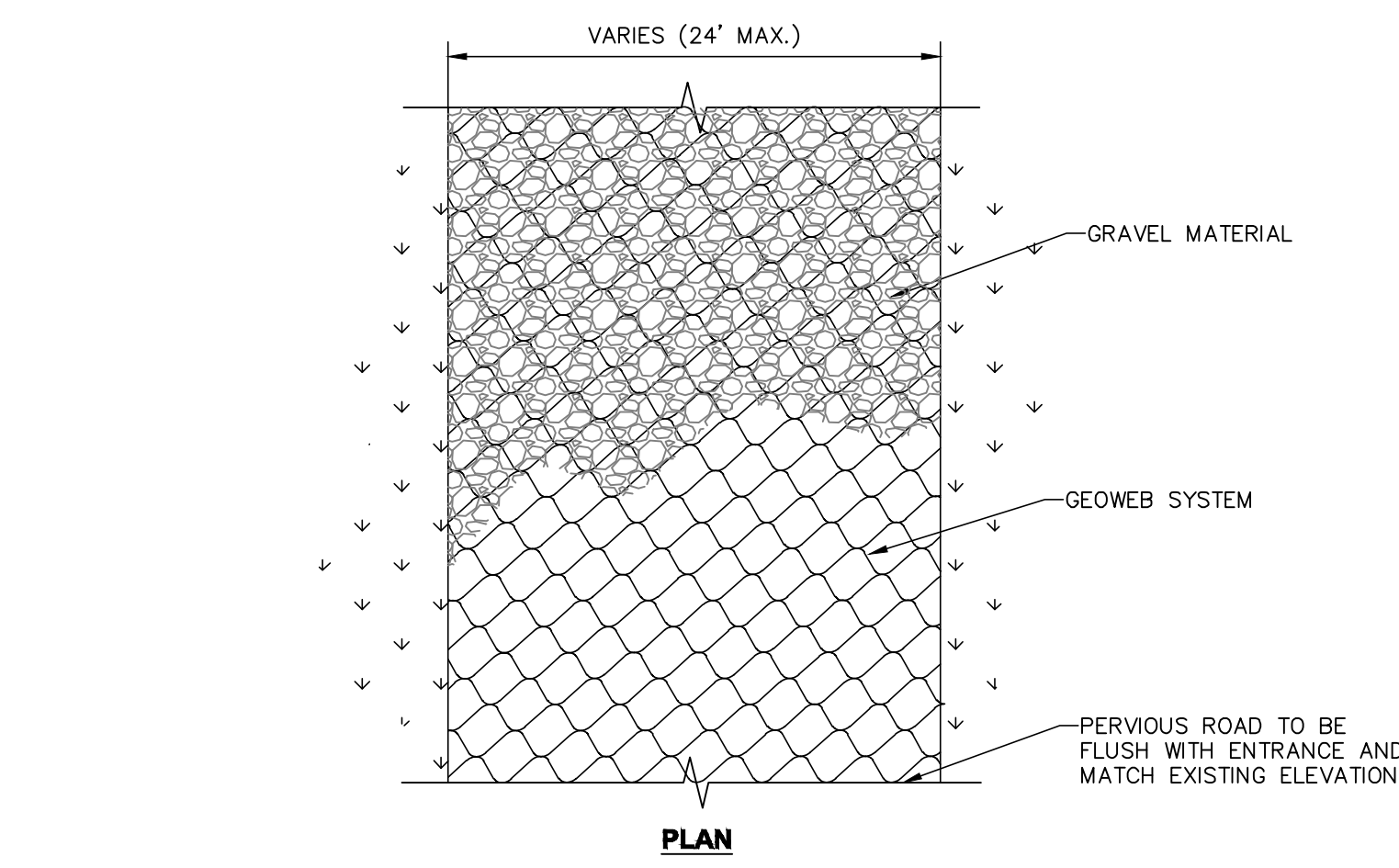
**WOVEN GEOTEXTILE MATERIAL NOTES:**

- SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS. PLACID SOILS CONSIST OF POORLY DRAINED SOILS COMPOSED OF FINELY TEXTURED PARTICLES AND ARE PRONE TO RUTTING. PLACID SOILS ARE TYPICALLY PRESENT IN LOW-LYING AREAS WITH HYDROLOGIC SOILS GROUP (HSG) OF C OR D, OR AS SPECIFIED FROM AN ENVIRONMENTAL SCIENTIST, SOIL SCIENTIST, OR GEOTECHNICAL DATA.
- THE CONCERN FOR POTENTIAL REDUCTION OF NATIVE INFILTRATION RATES DUE TO THE GEOTEXTILE MATERIAL WOULD NOT BE A SIGNIFICANT CONCERN IN POORLY DRAINED SOILS WHERE SEGREGATION OF PERVIOUS STONE AND NATIVE MATERIALS IS CRUCIAL FOR LONG TERM OPERATION AND MAINTENANCE.

**BASIS OF DESIGN:** TENCATE MIRAFI 160N; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM



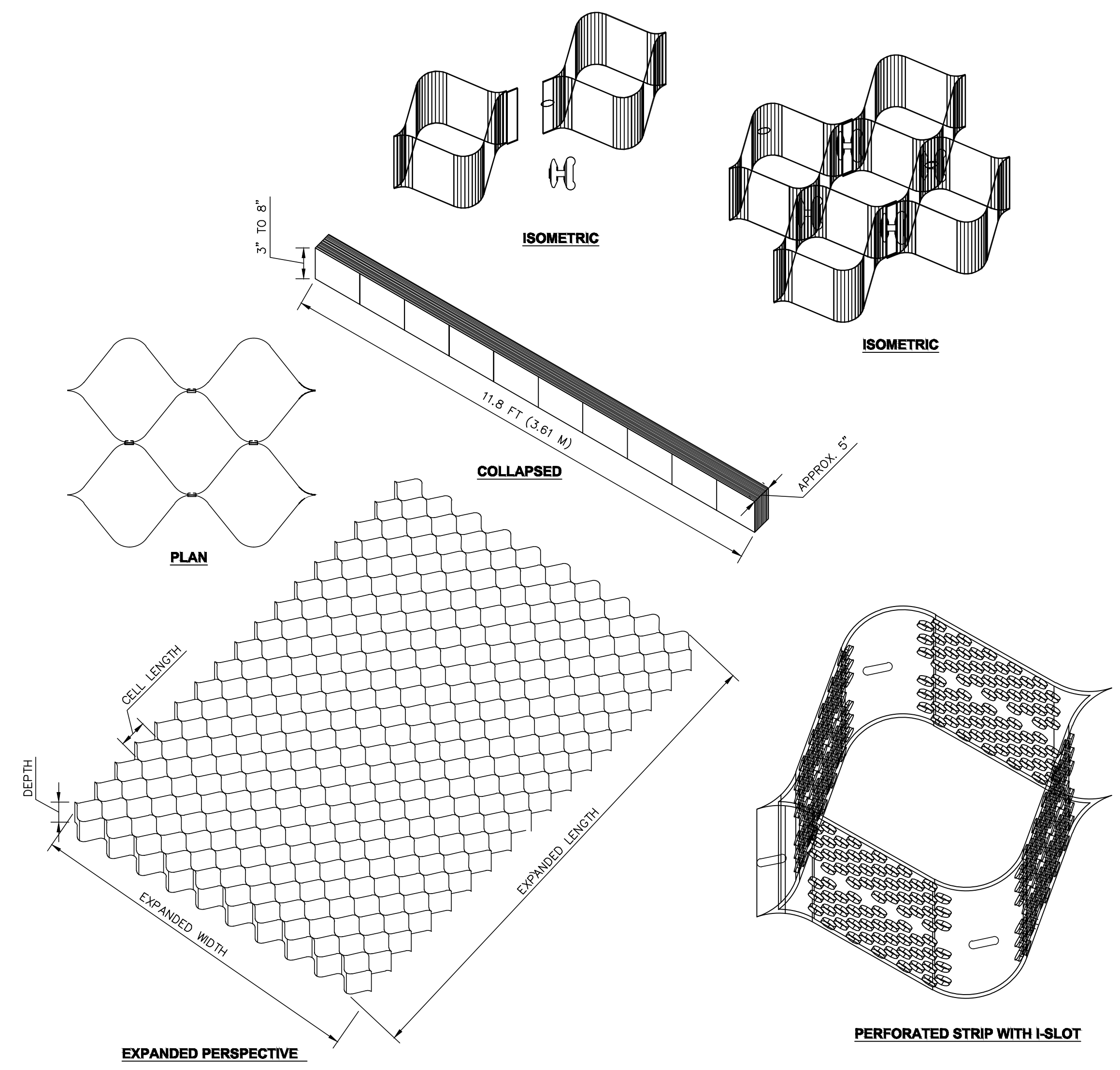
**A LIMITED USE PERVIOUS ACCESS ROAD - 0% TO 10% SLOPES**  
SCALE: N.T.S.



**C LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES**  
SCALE: N.T.S.

**NOTE:**  
1. THE ROADSIDE DITCH SHALL BE DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED AND VEGETATED WATERWAYS. ADDITIONAL DETAILS WILL BE PROVIDED SPECIFIC TO THE SITE DESIGN.

**B LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES WITH DITCH**  
SCALE: N.T.S.



**D GEOWEB SYSTEM**  
SCALE: N.T.S.

**1 ACCESS ROAD SECTION - TYP.**  
SCALE: NONE  
CROSS REFERENCE: NONE

**PRELIMINARY**

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.
					© 2023 C.T. MALE ASSOCIATES DESIGNER: MLS DRAFTED : MLS CHECKED : OKS PROJ. NO : 22.2303 SCALE : AS NOTED DATE : MARCH 24, 2023

**SITE DETAILS**

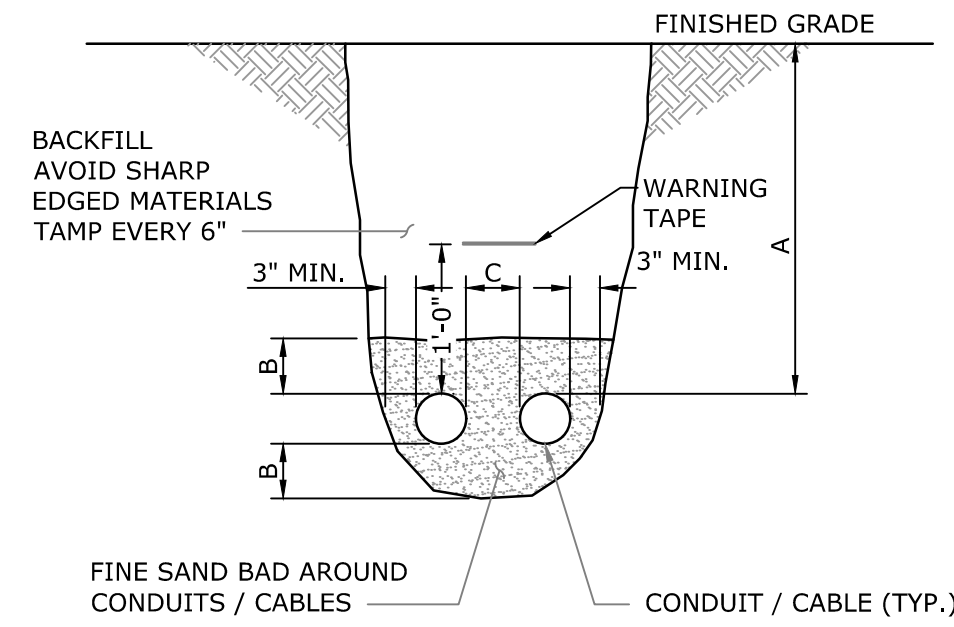
**LANSING COMMUNITY SOLAR, LLC**  
GENIE SOLAR ENERGY

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  
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www.ctmale.com

**C-502**  
SHEET 09 OF 14  
DWG. NO: 23-015

CAD DWG. FILE NAME: K:\Projects\222303\Civil\00\_Drawings and Maps\C-502.dwg



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"

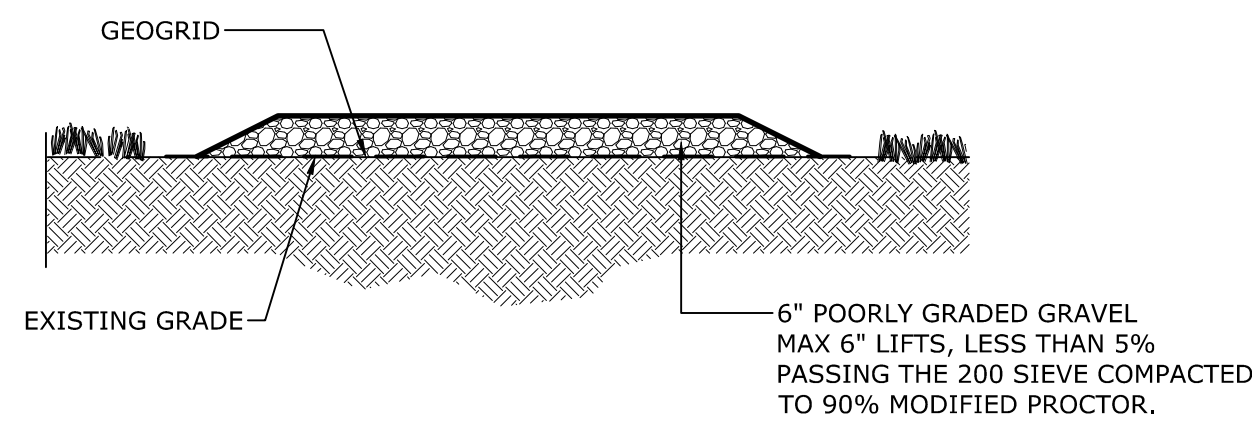
**NOTES:**

- 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		

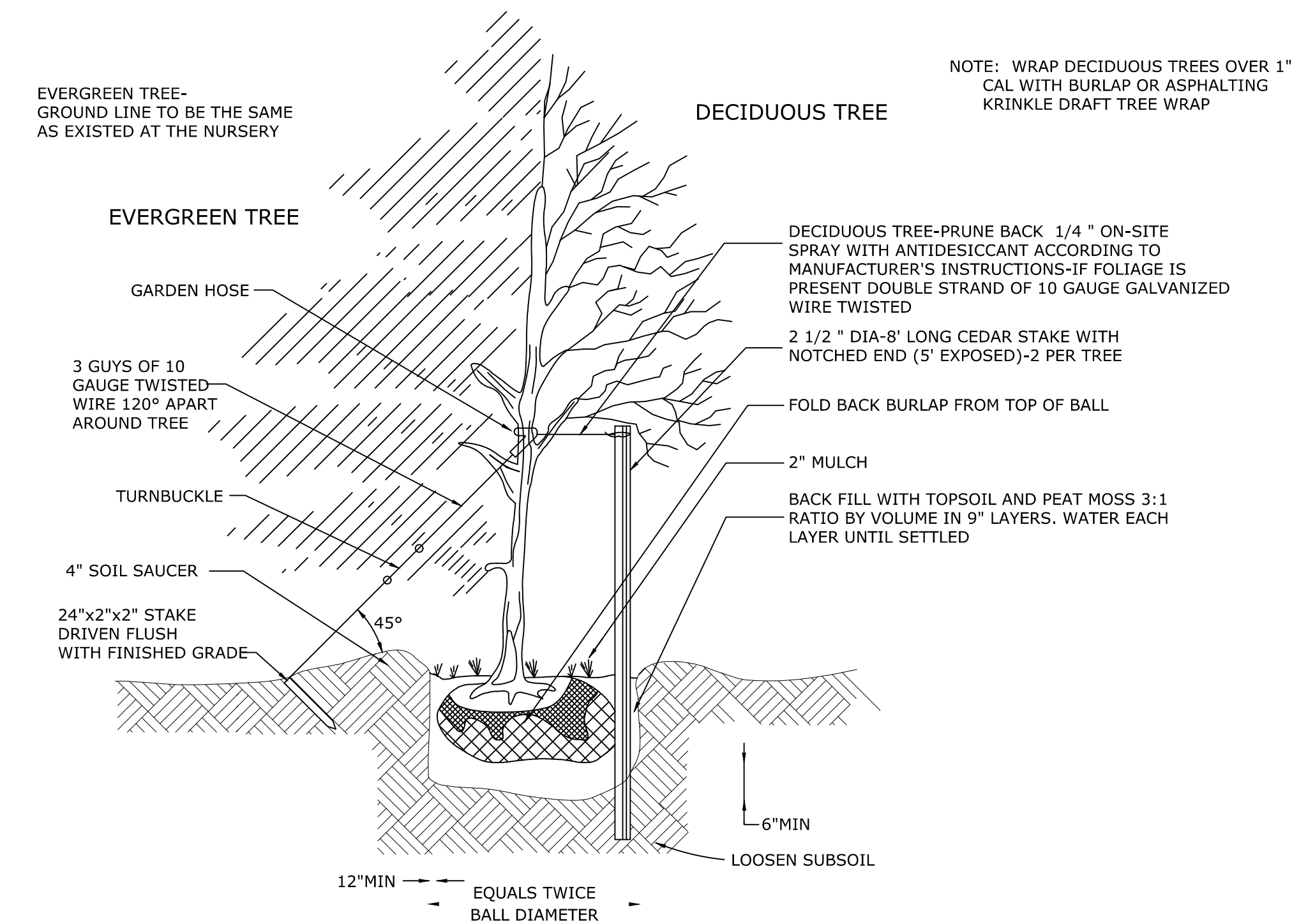
**2 SEED MIXTURES DETAIL**  
C-503 SCALE: NTS CROSS REFERENCE: NONE



**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

**PRELIMINARY**

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

**SITE & ERSOSION AND SEDIMENT CONTROL DETAILS**

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

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

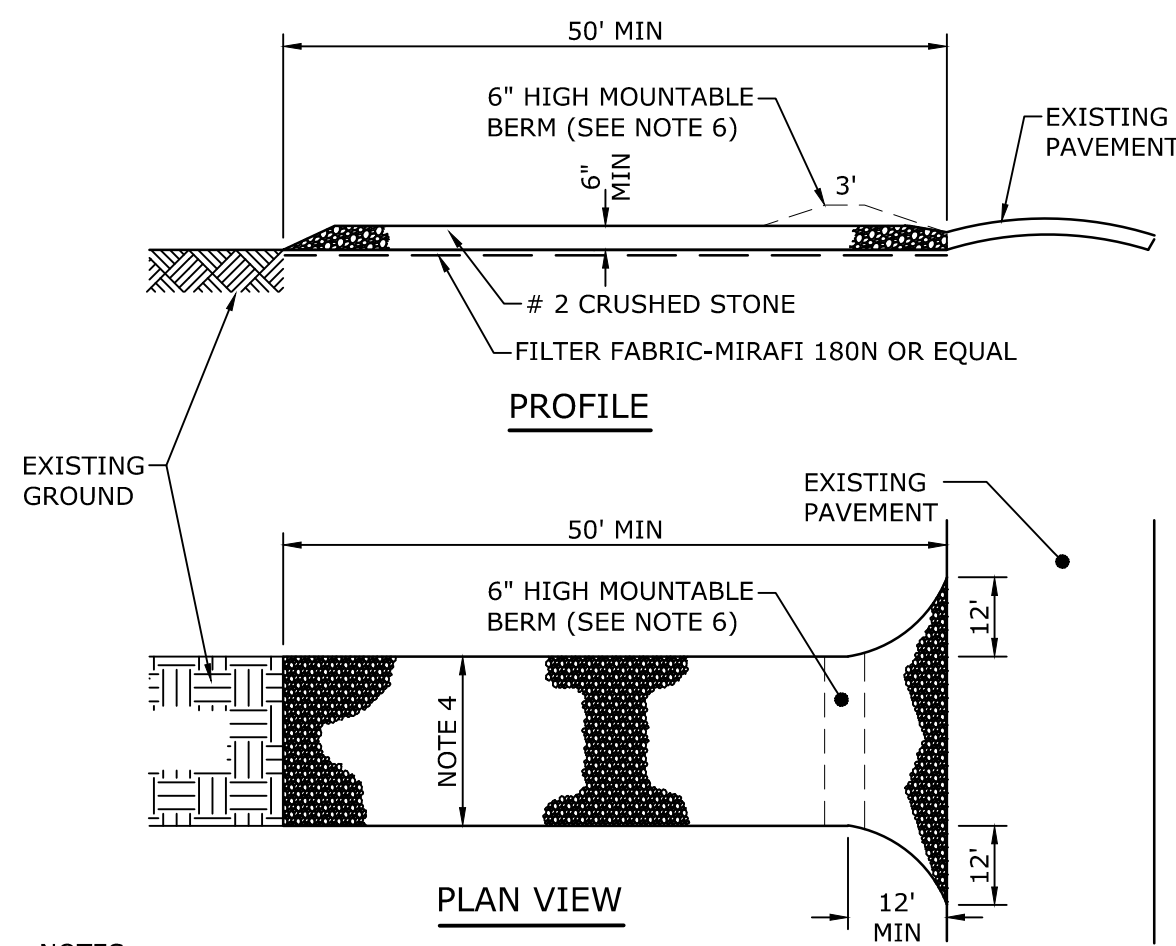
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DESIGNER: MLS  
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**C-503**  
SHEET 10 OF 14  
DWG. NO: 23-015





- 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.

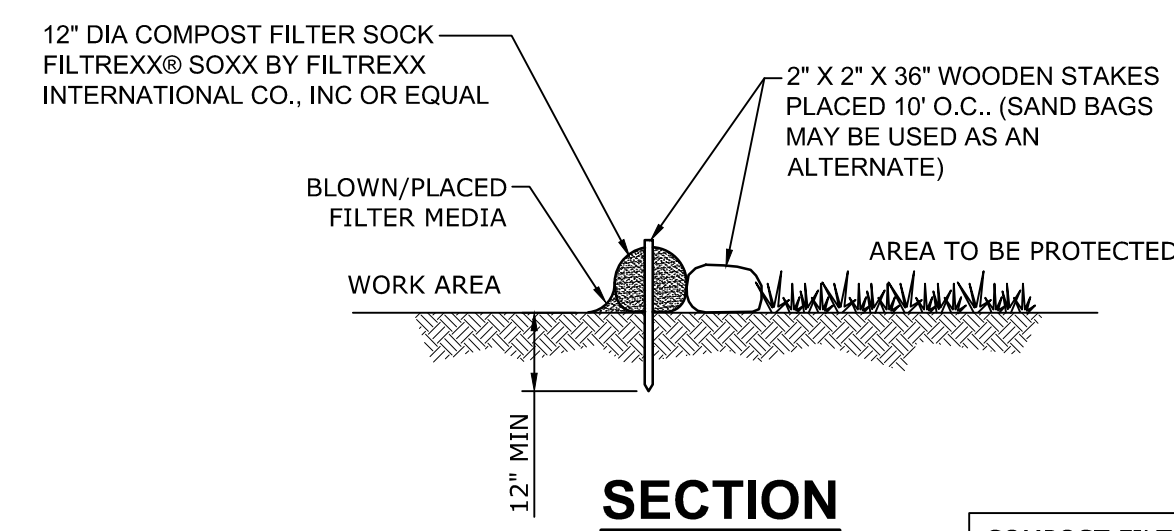
**1 STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
SCALE: NONE  
CROSS REFERENCE: NONE

**SEEDING AND MULCHING NOTES:**

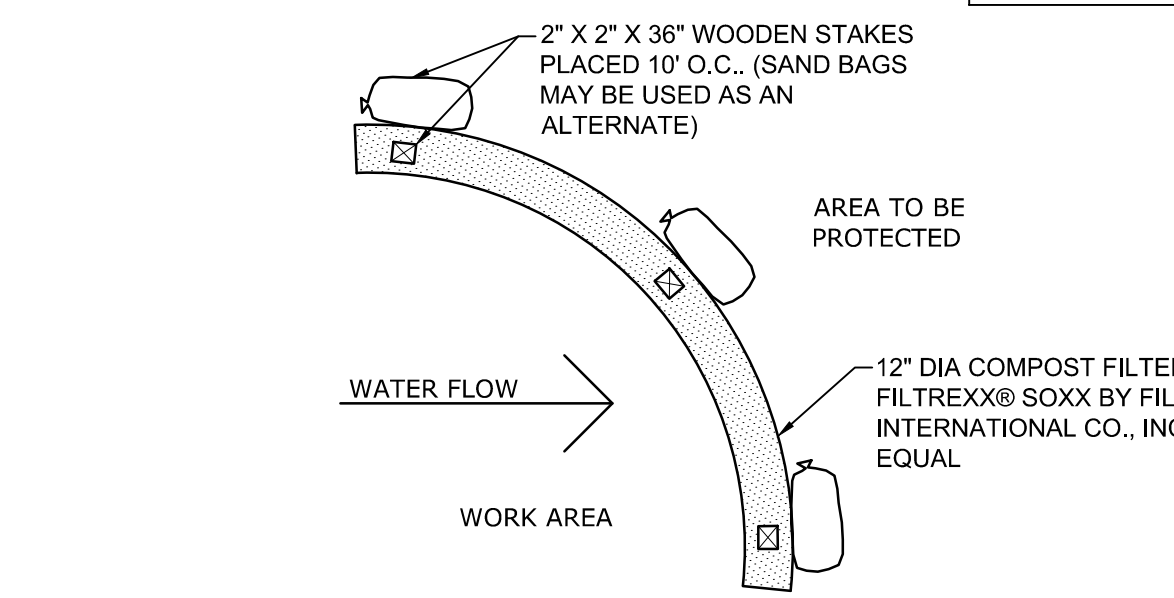
- TEMPORARY STABILIZATION MEASURES SHALL START AS SOON AS PRACTICAL ON PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NOT MORE THAN (7) DAYS AFTER WORK HAS CEASED. ACCEPTABLE TEMPORARY STABILIZATION MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO SEEDING, MULCH, 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.

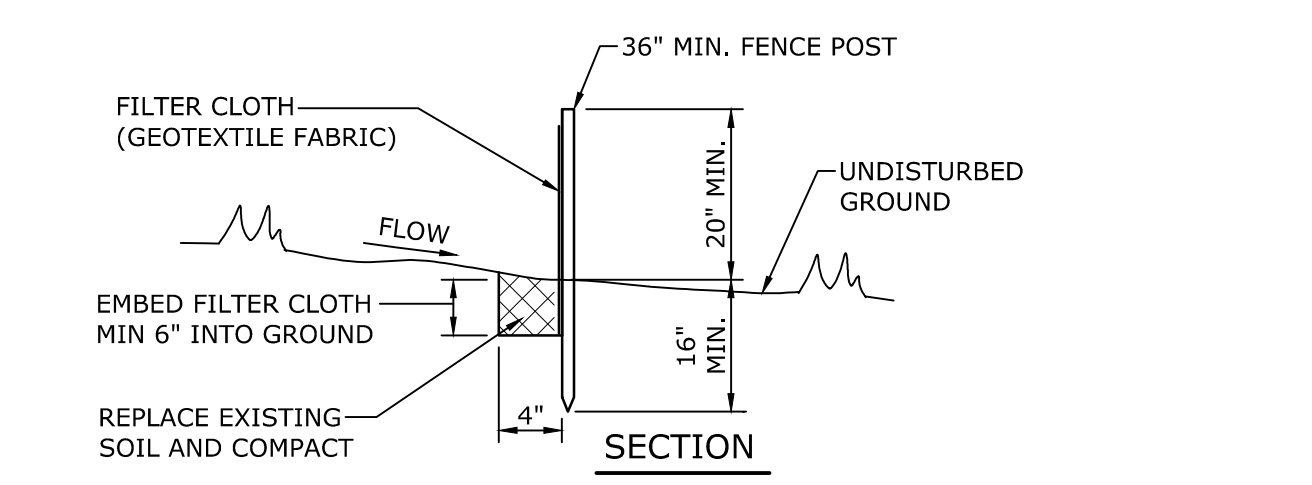
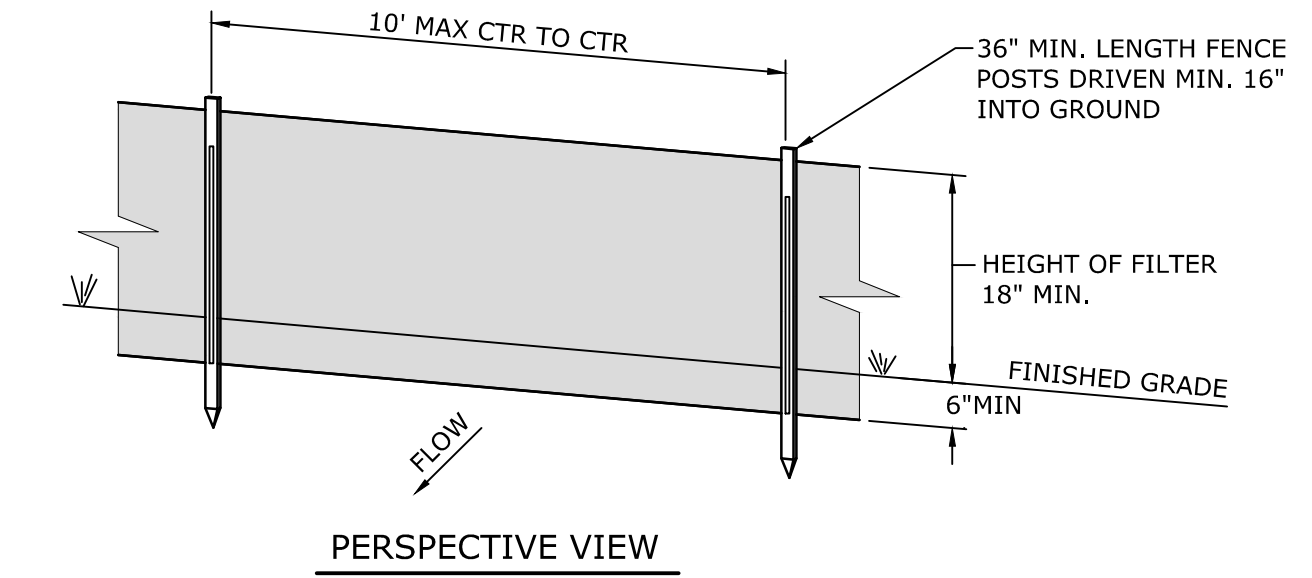


COMPOST FILTER SOCK MAY BE USED IN AREAS OF ROCK WHERE INSTALLATION OF SILT FENCE IS IMPRACTICAL



- 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 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 STANDARD SILT FENCE**  
SCALE: NONE  
CROSS REFERENCE: NONE

**SILT FENCE/COMPOST FILTER SOCK (CFS) NOTES:**

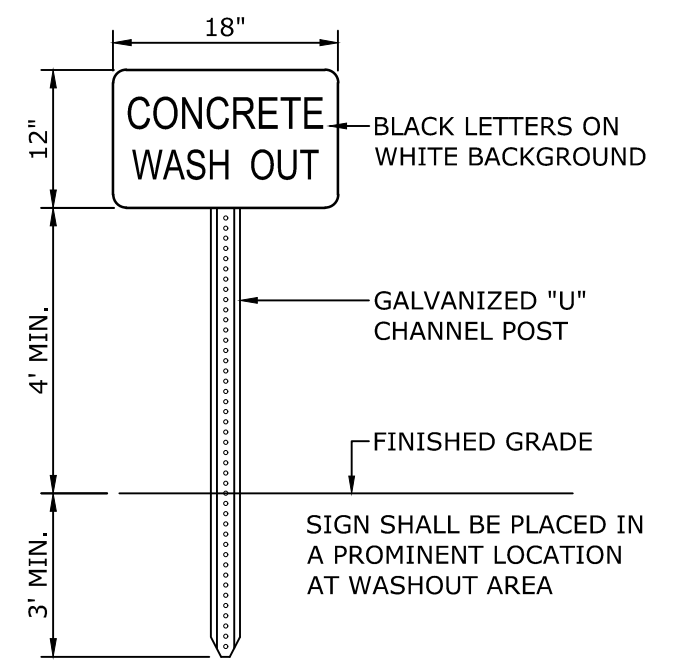
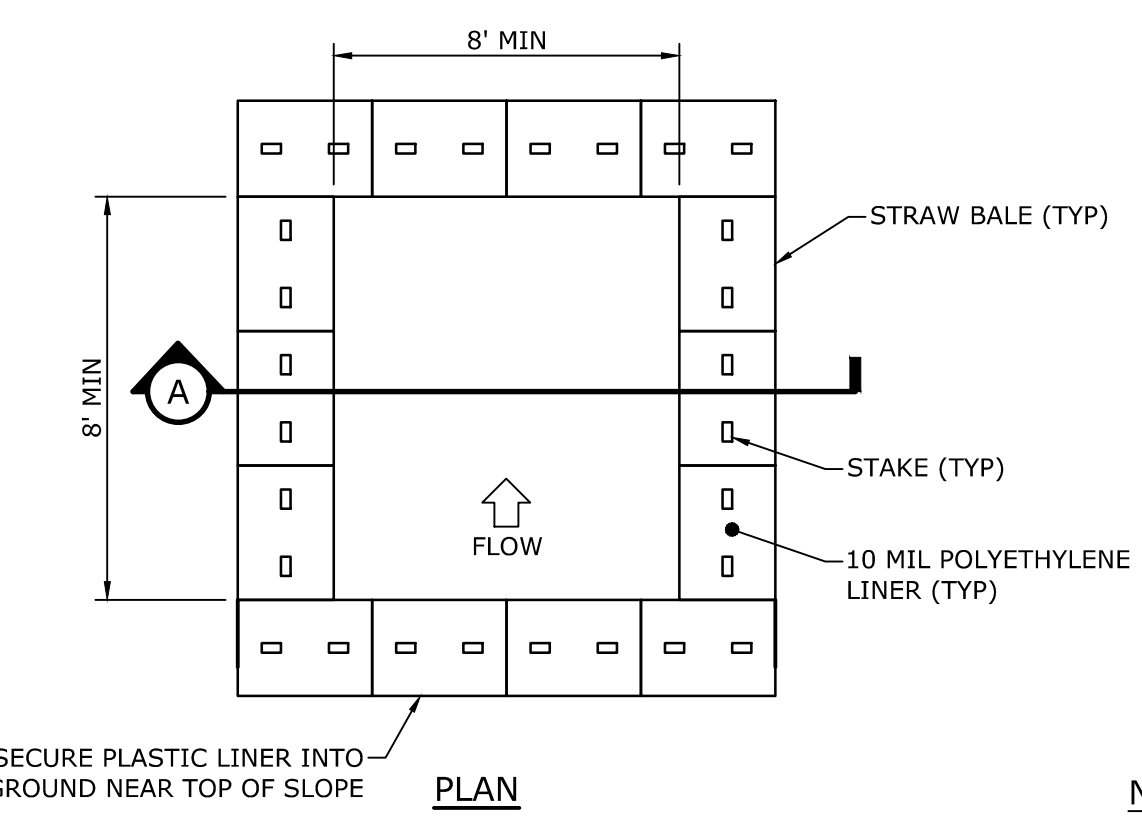
- SILT FENCE OR CFS SHALL BE PLACED ON THE DOWNSLOPE SIDE OF DISTURBED AREAS AND AROUND THE PERIMETER OF SOIL STOCKPILES.
- COMPOST FILTER SOCK SHALL BE PLACED AROUND THE BOUNDARY OF WETLANDS ADJACENT TO THE WORK AREA, AND AT THE EDGE OF WETLANDS AFTER CONSTRUCTION IS COMPLETED.
- SILT FENCE SHALL BE 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.

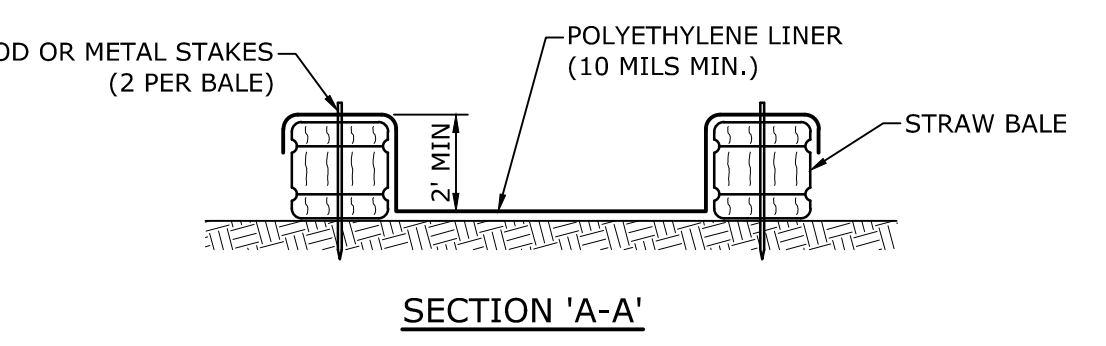


**WASHOUT SIGN**

**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 CONCRETE WASHOUT DETAIL**  
SCALE: NONE  
CROSS REFERENCE: NONE



**PRELIMINARY**

**EROSION AND SEDIMENT CONTROL DETAILS**

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

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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**NYS DOT STANDARD WZTC NOTES**

**WORK ZONE TRAFFIC CONTROL REVISIONS:**

PROPOSED REVISIONS TO THE WORK ZONE TRAFFIC CONTROL (WZTC) PLAN OR MODIFICATIONS TO THE 619 STANDARD SHEETS SHALL BE SUBMITTED TO THE ENGINEER FOR THE REVIEW AND APPROVAL BY THE REGIONAL TRAFFIC ENGINEER PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH REVISIONS OR MODIFICATIONS. THE CONTRACTOR SHALL NOT IMPLEMENT THE PROPOSED REVISIONS WITHOUT APPROVAL FROM THE REGIONAL TRAFFIC ENGINEER. WHEN APPLICABLE, NYS DOT WORK ZONE TRAFFIC CONTROL (WZTC) TYPICAL APPLICATIONS SHALL BE USED. TYPICALS CAN BE FOUND AT [HTTPS://WEBAPPS.DOT.NY.GOV/WORK-ZONE-TRAFFIC-CONTROL](https://webapps.dot.ny.gov/work-zone-traffic-control)

**TRAVEL LANE WIDTHS IN WORK ZONES:**

WHERE NOT SHOWN IN THE WZTC PLANS OR OTHERWISE AUTHORIZED BY NYS DOT (OR THE ENGINEER), TRAVEL LANE WIDTHS IN WORK ZONES SHALL BE A MINIMUM OF 11 FT ON FREEWAYS, RAMPS, EXPRESSWAYS AND MULTI-LANE CONVENTIONAL ROADWAYS AND 10 FT ON ALL OTHER CONVENTIONAL ROADWAYS.  
\*(MULTI-LANE ROADWAYS ARE THOSE WITH TWO OR MORE THRU LANES IN ONE OR BOTH DIRECTIONS.)

WORK ZONES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME IN EACH DIRECTION ON DIVIDED ROADWAYS, UNLESS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL SCHEDULE WORK SO THAT ALL TRAVEL LANES AND RAMPS IN EACH DIRECTION ARE OPEN WHEN THE CONTRACTOR'S OPERATIONS ARE CLOSED OR SUBSTANTIALLY CLOSED DOWN.

DAILY CLOSURES MAY OCCUR OFF OF LONG-TERM CLOSURES AND SHALL BE SUBJECT TO DAILY CLOSURE RESTRICTIONS. WORK ZONES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME ON UNDIVIDED HIGHWAYS.

**FLAGGING OPERATIONS:**

WHEN A PEDESTRIAN APPROACHES A FLAGGER STATION, THE FLAGGER SHALL STOP TRAFFIC AND DIRECT THE PEDESTRIAN TO A SAFE ROUTE THROUGH THE WORK AREA. FLAGGERS SHALL COORDINATE THE FLAGGING OF THE WORK ZONE TO ENSURE PEDESTRIANS CAN SAFELY PROCEED THROUGH THE AREA. IF THERE IS MORE THAN THE OCCASIONAL PEDESTRIAN WITHIN THE PROJECT LIMITS, REFER TO THE SITE SPECIFIC PEDESTRIAN WZTC PLAN.

**NOTIFICATION REQUIREMENTS:**

REGION 3 HAS A WORK ZONE TRAFFIC CONTROL (WZTC) NOTIFICATION POLICY WHICH REQUIRES ENGINEERS/CONTRACTOR TO NOTIFY THE REGIONAL TRANSPORTATION MANAGEMENT CENTER (RTMC) PRIOR TO ALLOWING A CONTRACTOR TO IMPLEMENT WORK ZONE TRAFFIC CONTROL ACTIVITIES WITHIN THE HIGHWAY RIGHT OF WAY. WORK ZONE NOTIFICATION IS REQUIRED FOR THE FOLLOWING:

FREEWAYS AND EXPRESSWAYS: ALL LANE, SHOULDER, ROAD, RAMP OR BRIDGE CLOSURES. (THIS INCLUDES MOBILE OPERATIONS WHICH OCCUPY THE LANE OR SHOULDERS.)

ALL OTHER STATE HIGHWAYS: ALL LANE CLOSURES WHOSE DURATION WILL BE GREATER THAN 2 HOURS AND ALL ROAD/BRIDGE CLOSURES.

THE CONTRACTOR SHALL REPORT PROPOSED WZTC ACTIVITIES NOTED ABOVE TO THE TMC BY NOON OF THE BUSINESS DAY (I.E. MONDAY THROUGH FRIDAY EXCLUDING HOLIDAYS) PRECEDING THE PROPOSED WZTC ACTIVITY. FAILURE TO DO SO WILL RESULT IN DISAPPROVAL TO PERFORM THE UNREPORTED WZTC ACTIVITY UNTIL THE ABOVE NOTIFICATIONS REQUIREMENTS ARE SATISFIED.

NO PLANNED WZTC ACTIVITY SHALL BE IMPLEMENTED WITHOUT FIRST RECEIVING CLEARANCE FROM THE RTMC.

**ACCESS:**

THE CONTRACTOR SHALL ENSURE THAT ACTIVE LANES OF TRAFFIC ON FREEWAYS ARE NOT CROSSED BY PEDESTRIAN WORKERS. FOR ALL OTHER HIGHWAYS, THE CONTRACTOR SHALL ENSURE THAT PEDESTRIAN WORKERS CROSS ACTIVE LANES OF TRAFFIC ONLY AT PROPERLY MARKED OR UNMARKED CROSSWALKS AND/OR DEDICATED PEDESTRIAN WALKWAYS. IT IS REQUIRED THAT THE PROJECT SAFETY AND HEALTH PLAN ADDRESS ACCESS TO EACH WORK AND STAGING AREA.

WHERE IT IS FEASIBLE, VEHICLES AND EQUIPMENT USED FOR THE WORK AND TRANSPORTING OF WORKERS TO/FROM THE WORK SITE SHALL ENTER AND LEAVE THE AREA CLOSED BY CHANNELIZING DEVICES WITHIN THE TERMINATION AREA OF THE TEMPORARY TRAFFIC CONTROL ZONE. WHERE SUCH ACCESS WITHIN THE TERMINATION AREA IS NOT FEASIBLE, OTHER AREAS FOR ENTRY AND EXIT SHALL BE DETERMINED AND INCLUDED IN THE PROJECT SAFETY & HEALTH PLAN, INCLUDING ILLUSTRATED EXAMPLES (TYPICALS) TO CLEARLY SHOW THE TEMPORARY TRAFFIC CONTROL ELEMENTS THAT WILL BE PROVIDED.

**CHANNELIZING DEVICES:**

ALL CHANNELIZING DEVICES SHALL BE PLACED SO AS TO PROVIDE A 2-FOOT LATERAL CLEARANCE TO THE TRAVELED WAY UNLESS OTHERWISE SHOWN ON THE PLANS. WHERE POSSIBLE A LATERAL BUFFER SPACE OF 2 FOOT MINIMUM SHALL BE PROVIDED BETWEEN THE WORKSPACE AND THE CHANNELIZING DEVICES.

CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL BE 40' MAXIMUM FOR POSTED SPEED LIMITS 40 MPH OR GREATER AND 20' MAXIMUM FOR POSTED SPEED LIMITS 35 MPH OR LESS.

STANDARD CONES AND TUBULAR MARKERS SHALL NOT BE USED FOR CHANNELIZATION AND DELINEATION DURING THE HOURS OF DARKNESS, WHICH IS DEFINED AS THE PERIOD BETWEEN SUNSET AND SUNRISE.

SIGNS  
ALL CONSTRUCTION SIGNS SHALL BE MOUNTED AT A HEIGHT OF 7 FEET ABOVE THE EDGE OF TRAVEL LANE.

SIGNS SHALL NOT ENCR OACH MORE THAN 4" INTO SHOULDERS USED BY PEDESTRIANS OR BICYCLES.

WHERE SHOULDER WIDTHS ARE LIMITED AND SIGNS CANNOT BE ERECTED BEYOND THE SHOULDER, CONSTRUCTION SIGNS MAY NEED TO BE MOUNTED ON CONCRETE MEDIAN BARRIERS, BRIDGE PARAPETS, ETC.

**MISCELLANEOUS (LOCAL OR PERMIT PROJECTS):**

THE CONTRACTOR SHALL BE AWARE THAT THE WORK ZONE TRAFFIC CONTROL IS A VERY CRITICAL ITEM OF THE PERMIT AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 "WORK ZONE TRAFFIC CONTROL" OF THE STANDARD SPECIFICATIONS, THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WORK ZONE TRAFFIC CONTROL AT ALL TIMES FOR THE DURATION OF THE PERMITTED WORK.

ACTUAL FIELD CONDITIONS MAY REQUIRE OTHER SIGNS AND OTHER ARRANGEMENTS OF SIGNS. DISTANCES SHALL BE ADAPTED TO PREVAILING CONDITIONS. SIGNS SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY. SIGNS THAT ARE NOT APPLICABLE SHALL BE COVERED OR OBTSCURED FROM SIGHT. ALL SIGN NUMBERS REFER TO THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT.

PEDESTRIAN ACCOMMODATIONS SHALL BE MAINTAINED FOR THE DURATION OF THE PROPOSED WORK. ANY DISTURBED AREAS WITHIN THE STATE RIGHT-OF-WAY SHALL BE ADEQUATELY FENCED TO PREVENT PEDESTRIAN ACCESS WHEN THE CONTRACTORS' OPERATIONS ARE SHUT DOWN.

MATERIALS, EQUIPMENT, AND VEHICLES SHALL NOT BE STORED OR PARKED WITHIN THE STATE RIGHT-OF-WAY BEFORE WORK BEGINS OR AFTER CONTRACTOR'S OPERATIONS ARE SHUT DOWN. STAGING AREAS OUTSIDE THE RIGHT-OF-WAY SHALL BE USED TO STOCKPILE ALL CONSTRUCTION MATERIALS.

DURING WORKING HOURS, NO CONSTRUCTION MATERIAL MAY BE STORED OR PLACED ON THE ROADWAY OR ROADBED EXCEPT WITHIN A PROTECTED WORK AREA.

VEHICLES BELONGING TO THE CONTRACTOR OR WORKERS SHALL NOT BE PARKED WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG A ROADWAY BEING USED BY THE PUBLIC, UNLESS THEY ARE PARKED WITHIN A PROTECTED WORK AREA.

DURING NON-WORKING HOURS, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN 30 FEET OF THE EDGE OF PAVEMENT.

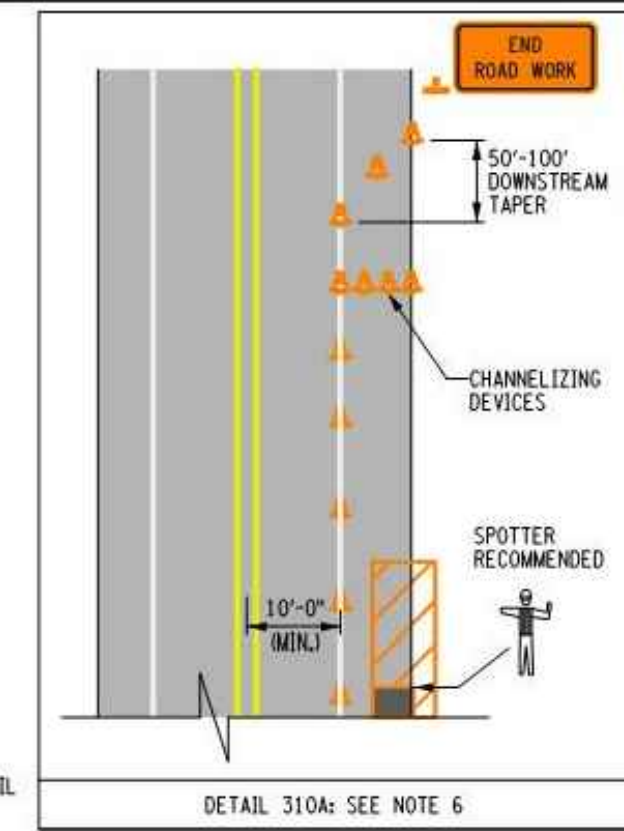
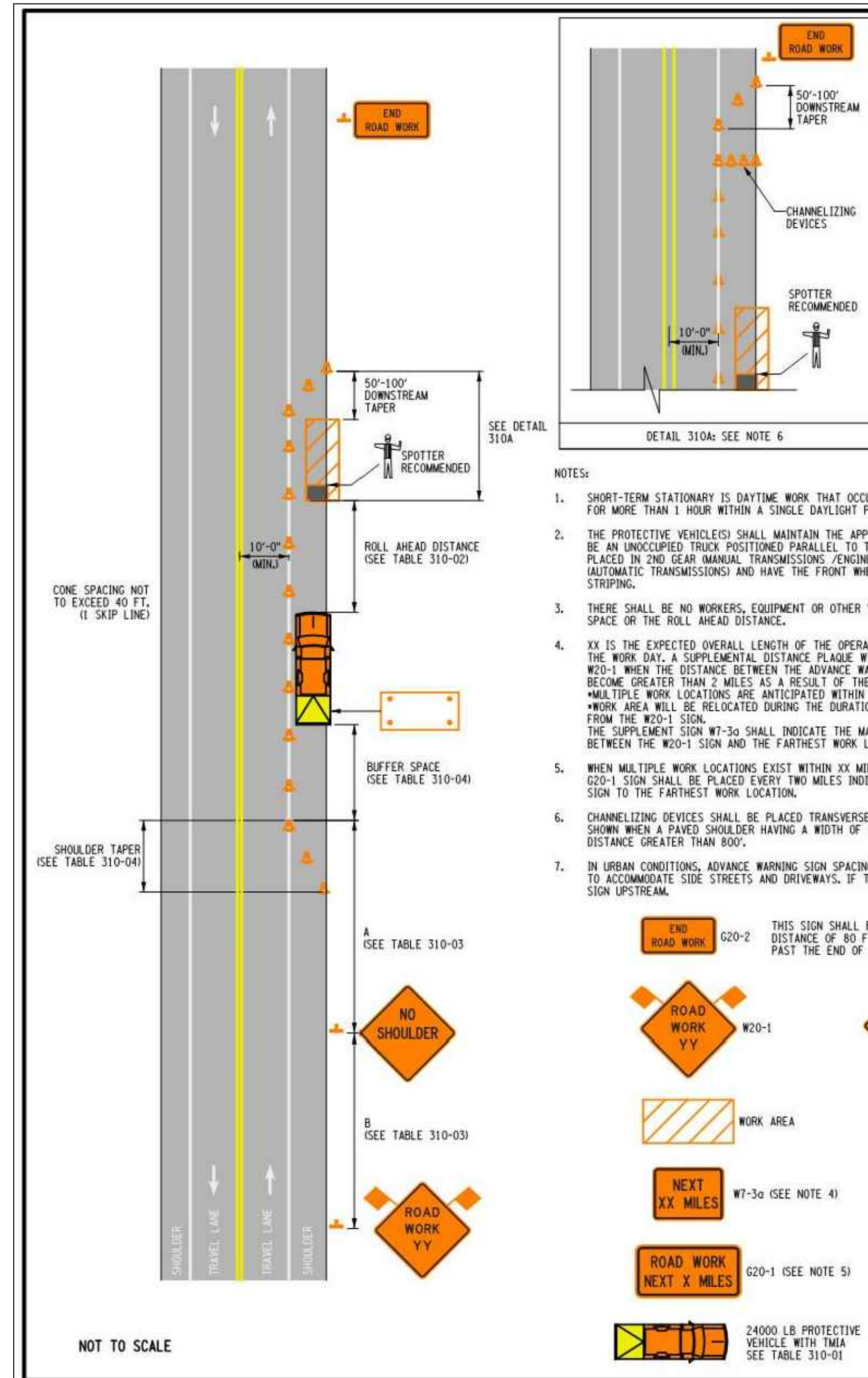
W20-7A "FLAGGER" SIGNS SHALL BE USED WHENEVER FLAGGING OCCURS FOR MORE THAN A BRIEF PERIOD OF TIME. THE SIGNS SHALL BE PROMPTLY REMOVED, COVERED, OR FACED AWAY FROM TRAFFIC WHEN THE FLAGGING OPERATION CEASES.

ALL FLAGGING STATIONS AND LANE CLOSURES SHOULD BE LOCATED TO ENSURE MAXIMUM VISIBILITY.

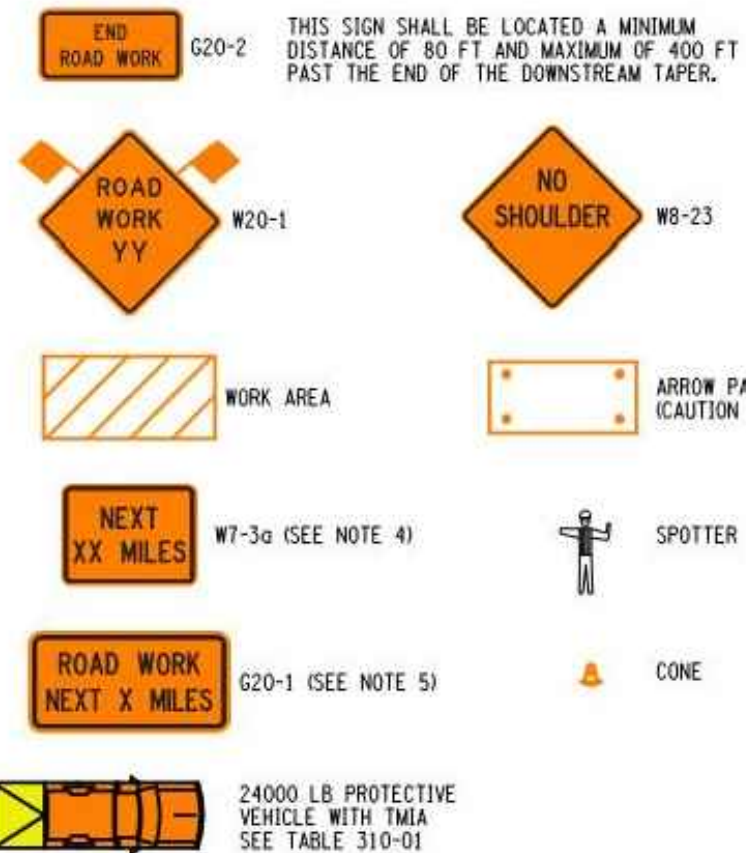
NO DROP-OFF GREATER THAN SIX INCHES SHALL BE LEFT OVERNIGHT WITHIN 30 FEET OF THE EDGE OF PAVEMENT. DROP-OFFS LESS THAN SIX INCHES WILL BE PERMITTED IF PROPER DELINEATION AND SIGNING IS PROVIDED, AND PRIOR PERMISSION IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT. A DROP-OFF IS CONSIDERED ELIMINATED IF TAPERED AWAY BY A 1 ON 6 SLOPE OR FLATTER.

CARE SHALL BE TAKEN TO ENSURE THAT NO DAMAGE OCCURS TO THE EXISTING PAVEMENT/SHOULDER/CURB AREAS AS A RESULT OF CONSTRUCTION EQUIPMENT MOVEMENT.

THE CONTRACTOR MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL, BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE NYS DOT REGIONAL DIRECTOR OR HIS DESIGNEE.



- NOTES:
1. SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.
  2. THE PROTECTIVE VEHICLE(S) SHALL MAINTAIN THE APPROPRIATE ROLL AHEAD DISTANCE, BE AN UNOCCUPIED TRUCK POSITIONED PARALLEL TO TRAFFIC, PARKING BRAKE SET, PLACED IN 2ND GEAR (MANUAL TRANSMISSIONS), ENGINE OFF OR PARK / NEUTRAL (AUTOMATIC TRANSMISSIONS) AND HAVE THE FRONT WHEELS ALIGNED WITH THE LANE STRIPING.
  3. THERE SHALL BE NO WORKERS, EQUIPMENT OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD DISTANCE.
  4. XX IS THE EXPECTED OVERALL LENGTH OF THE OPERATION TO BE COMPLETED WITHIN THE WORK DAY. A SUPPLEMENTAL DISTANCE PLAQUE W7-30 SHALL BE USED WITH SIGN W20-1 WHEN THE DISTANCE BETWEEN THE ADVANCE WARNING SIGNS AND WORK MAY BECOME GREATER THAN 2 MILES AS A RESULT OF THE FOLLOWING SITUATIONS:  
\* MULTIPLE WORK LOCATIONS ARE ANTICIPATED WITHIN XX MILES FROM THE W20-1 SIGN \* WORK AREA WILL BE RELOCATED DURING THE DURATION OF THE WORK WITHIN XX MILES FROM THE W20-1 SIGN. THE SUPPLEMENT SIGN W7-30 SHALL INDICATE THE MAXIMUM ANTICIPATED DISTANCE BETWEEN THE W20-1 SIGN AND THE FARTHEST WORK LOCATION.
  5. WHEN MULTIPLE WORK LOCATIONS EXIST WITHIN XX MILES FROM THE W20-1 SIGN, A G20-1 SIGN SHALL BE PLACED EVERY TWO MILES INDICATING THE DISTANCE FROM THE SIGN TO THE FARTHEST WORK LOCATION.
  6. CHANNELIZING DEVICES SHALL BE PLACED TRANSVERSELY A MINIMUM OF EVERY 800' AS SHOWN WHEN A PAVED SHOULDER HAVING A WIDTH OF 8' OR GREATER IS CLOSED FOR A DISTANCE GREATER THAN 800'.
  7. IN URBAN CONDITIONS, ADVANCE WARNING SIGN SPACINGS MAY BE ADJUSTED IN ORDER TO ACCOMMODATE SIDE STREETS AND DRIVEWAYS. IF THERE IS A CONFLICT, MOVE THE SIGN UPSTREAM.



**TABLE 310-01: PROTECTIVE VEHICLE REQUIREMENTS**

CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY		
		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH
LANE CLOSURE OR ENCROACHMENT	EXPOSURE CONDITIONS <sup>1</sup>			
	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMA	P, TMA	P
SHOULDER CLOSURE OR ENCROACHMENT	OTHER HAZARDS NO WORKERS EXPOSED	P, TMA	P	SEE NOTE 2
	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMA	P	P
	OTHER HAZARDS NO WORKERS EXPOSED	P, TMA	P	SEE NOTE 2

LEGEND  
P: PROTECTIVE VEHICLE REQUIRED FOR EACH CLOSED LANE & EACH CLOSED PAVED SHOULDER 8' OR WIDER. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE PROTECTIVE VEHICLE SHALL BE REPOSITIONED ACCORDINGLY  
TMA: TMA REQUIRED  
NOTES:  
1. THE EXPOSURE CONDITIONS ASSUMES THERE IS NO POSITIVE PROTECTION PRESENT  
2. EITHER A PROTECTIVE VEHICLE OR THE STANDARD BUFFER SPACE SHALL BE PROVIDED

**TABLE 310-02: ROLL AHEAD DISTANCE**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION	
	MIN	MAX
≥ 55	120/3	200/5
45 - 50	80/2	160/4
≤ 40	40/1	120/3

**TABLE 310-03: ADVANCE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS		SIGN LEGEND	
	A (FT.)	B (FT.)	XX	YY
URBAN (≤ 30 MPH)	100	100	AHEAD	AHEAD
URBAN (35-40 MPH)	200	200	AHEAD	AHEAD
URBAN (45 MPH)	350	350	1000 FT.	AHEAD
RURAL	500	500	1500 FT.	1000 FT.

\* PRECONSTRUCTION POSTED SPEED LIMIT

**TABLE 310-04: LONGITUDINAL BUFFER SPACE AND TAPER LENGTHS**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.) <sup>1</sup> * OF SKIP LINES	TAPER LENGTH L (FT.) <sup>2</sup> * OF SKIP LINES/ <sup>3</sup> * OF CHANNELIZING DEVICES				SHOULDER TAPER LENGTH L <sup>3</sup> (FT.) <sup>2</sup> * OF SKIP LINES/ <sup>3</sup> * OF CHANNELIZING DEVICES	
		FOR LANE WIDTH IN FT. (LATERAL SHIFT OF TRAFFIC FLOW PATH)				FOR SHOULDER WIDTH	
		10	11	12	≤ 4 FT.	5 - 7 FT.	≥ 8 FT.
25	155/4	120/3/4	120/3/4	120/3/4	40/1/2	40/1/2	40/1/2
30	200/5	160/4/5	160/4/5	200/5/6	40/1/2	40/1/2	40/1/2
35	250/6	200/5/6	240/6/7	240/6/7	40/1/2	40/1/2	80/2/3
40	305/8	280/7/8	320/8/9	320/8/9	40/1/2	80/2/3	80/2/3
45	360/9	440/11/12	520/13/14	560/14/15	80/2/3	80/2/3	120/3/4
50	425/11	520/13/14	560/14/15	600/15/16	80/2/3	120/3/4	160/4/5
55	495/13	560/14/15	600/15/16	680/17/18	80/2/3	120/3/4	160/4/5

**TABLE 310-05: REQUIRED SIGN SIZES\***

SIGN	NON-FREEWAY	FREEWAY
G20-1	36x18	48x24
G20-2	36x18	48x24
W7-30	24x18	36x30
W8-23	36x36	48x48
W20-1	36x36	48x48
WARNING FLAG	18x18	18x18

\*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

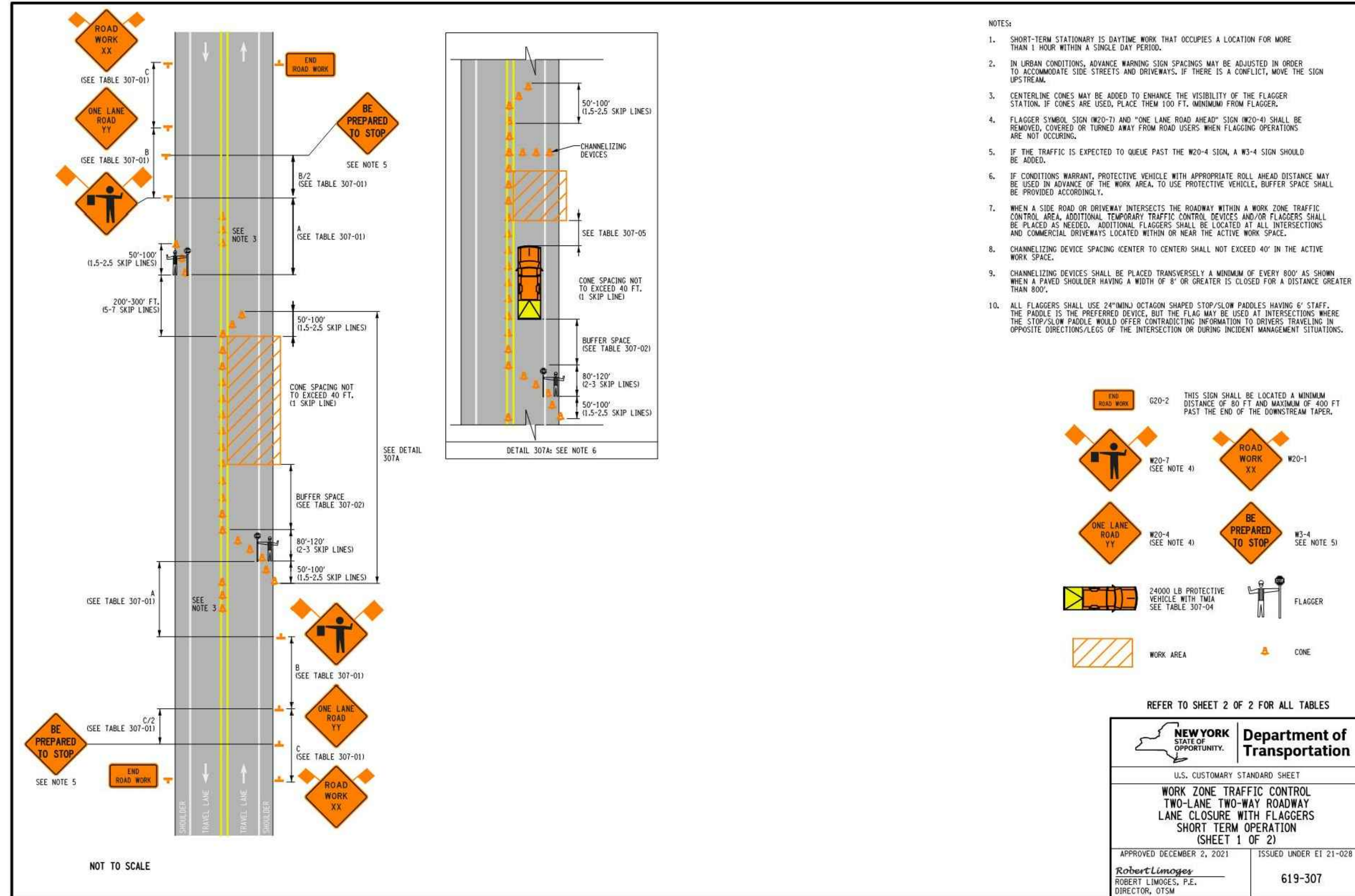
**NEW YORK STATE OF OPPORTUNITY**  
**Department of Transportation**  
U.S. CUSTOMARY STANDARD SHEET  
**WORK ZONE TRAFFIC CONTROL NON-FREEWAY SHOULDER CLOSURE SHORT TERM OPERATION**  
APPROVED DECEMBER 2, 2021  
ISSUED UNDER E1 21-028  
Robert Limoges, P.E., DIRECTOR, OTSM  
619-310

**1 SHORT DURATION SHOULDER CLOSURE**  
SCALE: NONE  
CROSS REFERENCE: NONE

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<b>TRAFFIC AND MAINTENANCE CONTROL DETAILS</b>						
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TOWN OF LANSING			TOMPKINS COUNTY, NEW YORK			
<b>C.T. MALE ASSOCIATES</b> 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 <a href="http://www.ctmale.com">www.ctmale.com</a>						
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NOT TO SCALE

**1 SHORT DURATION LANE CLOSURE**  
 SCALE: NONE  
 CROSS REFERENCE: NONE

**PRELIMINARY**

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**TRAFFIC AND MAINTENANCE CONTROL DETAILS**

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

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

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**C-702**  
 SHEET 13 OF 14  
 DWG. NO: 23-015



**TABLE 307-01: ADVANCE WARNING SIGN SPACING**

ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT.)	B (FT.)	C (FT.)	XX	YY
URBAN (< 30 MPH)	100	100	100	AHEAD	AHEAD
URBAN (35-40 MPH)	200	200	200	AHEAD	AHEAD
URBAN (> 45 MPH)	350	350	350	1000 FT.	AHEAD
RURAL	500	500	500	1500 FT.	1000 FT.

\* PRECONSTRUCTION POSTED SPEED LIMIT

**TABLE 307-02: LONGITUDINAL BUFFER SPACE**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	LONGITUDINAL BUFFER SPACE DISTANCE (FT.) * OF SKIP LINES
25	155/4
30	200/5
35	250/6
40	305/8
45	360/9
50	425/11
55	495/13

**TABLE 307-03: REQUIRED SIGN SIZES\***

SIGN	NON-FREEWAY	FREEWAY
G20-2	36x18	48x24
W3-4	36x36	48x48
W20-1	36x36	48x48
W20-4	36x36	48x48
W20-7	36x36	48x48
WARNING FLAG	18x18	18x18

\*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.

**TABLE 307-04: PROTECTIVE VEHICLE REQUIREMENTS**

CLOSURE TYPE	ROAD TYPE & SPEED	NON-FREEWAY		
		≥ 45 MPH	35 - 40 MPH	≤ 30 MPH
LANE CLOSURE OR ENCRoACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	P, TMIA	P
	OTHER HAZARDS NO WORKERS EXPOSED	P, TMIA	P	SEE NOTE 2
SHOULDER CLOSURE OR ENCRoACHMENT	WORKERS ON FOOT OR VEHICLE EXPOSED TO TRAFFIC	P, TMIA	P	P
	OTHER HAZARDS NO WORKERS EXPOSED	P, TMIA	P	SEE NOTE 2

**LEGEND**

P: PROTECTIVE VEHICLE REQUIRED FOR EACH CLOSED LANE & EACH CLOSED PAVED SHOULDER 8' OR WIDER, IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE PROTECTIVE VEHICLE SHALL BE REPOSITIONED ACCORDINGLY

TMIA: TMIA REQUIRED

**NOTES:**

- THE EXPOSURE CONDITIONS ASSUMES THERE IS NO POSITIVE PROTECTION PRESENT
- EITHER A PROTECTIVE VEHICLE OR THE STANDARD BUFFER SPACE SHALL BE PROVIDED

**TABLE 307-05: ROLL AHEAD DISTANCE**

PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	STATIONARY OPERATION	
	MIN	MAX
≥ 55	120/3	200/5
45 - 50	80/2	160/4
≤ 40	40/1	120/3

**NEW YORK STATE OF OPPORTUNITY** Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

**WORK ZONE TRAFFIC CONTROL TWO-LANE TWO-WAY ROADWAY LANE CLOSURE WITH FLAGGERS SHORT TERM OPERATION (SHEET 2 OF 2)**

APPROVED DECEMBER 2, 2021 ISSUED UNDER ET 21-028

Robert Limoges, P.E., DIRECTOR, OTSM 619-307

**GENERAL NOTES:**

- GENERAL:** ALL SIGN, CONES, BARRELS, BARRICADES AND CONC BARRIERS SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES CONTRACTOR REQUIRED TO PROVIDE SIGNAGE PLAN TO ENGINEER AND NYS DOT PRIOR TO CONSTRUCTION.
- SIGN SUPPORT:** THE CONTRACTOR SHALL SUPPLY ADEQUATE SUPPORTS SO THAT THE SIGNS ARE IN PROPER POSITION AND ALIGNMENT AS SHOWN IN THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, ALL SUPPORTS SHALL BE PAINTED WITH TWO(2) COATS OF WHITE PAINT.
- SIGN PANELS:** THE SIGN PANELS MAY BE MADE OF ALUMINUM, STEEL, OR PLYWOOD THE BACKS OF ALL WOOD SIGN PANELS SHALL RECEIVE TWO(2) COATS OF WHITE PAINT.
- SIGN FACE:** COLOR - THE COLOR OF THE BACKGROUND AND THE LEGEND OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE MARGIN SHALL BE OF THE SAME COLOR AS SPECIFIED FOR THE BACKGROUND. THE BORDER SHALL BE OF THE SAME COLOR AS THE LEGEND. SHAPE - THE SHAPE OF ALL SIGNS SHALL BE AS SHOWN ON THIS SHEET. CORNERS OF SIGNS SHALL HAVE ROUNDED CORNERS. REFLECTORIZATION - ALL SIGNS SHALL BE REFLECTORIZED USING HIGH INTENSITY REFLECTORIZED TAPE OR PAINT. ALL SIGNS SHALL BE CLEANED AND MAINTAINED REGULARLY. ALL SIGNS SHALL BE REVIEWED AT NIGHT AFTER ERECTION. ANY SIGNS NOT MEETING PROPER REFLECTION REQUIREMENTS WILL BE REPLACED. LETTERING AND BORDERS - SIGN LETTERING, BORDERS AND MARGINS SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- SIGN LOCATION:** SIGNS SHALL BE GENERALLY LOCATED ON THE RIGHT SIDE OF THE HIGHWAY FACING APPROACHING TRAFFIC. THE NEAR EDGE OF THE SIGN SHALL BE BETWEEN 6 AND 12 FEET FROM NEAREST EDGE OF THE TRAVELED ROADWAY OR BETWEEN 2 AND 12 FEET FROM THE FACE OF THE VERTICAL CURB. SIGNS SHOULD GENERALLY BE PLACED AT RIGHT ANGLES TO TRAFFIC. ROADSIDE SIGNS SHOULD BE MOUNTED SO THAT THE BOTTOM OF THE SIGN IS APPROXIMATELY 5 FEET ABOVE THE EDGE OF PAVEMENT. SIGNS MOUNTED ON BARRICADES OR TEMPORARY SIGNS IN THE ROADWAY MAY BE AT LOWER HEIGHTS. ALL SIGNS SHALL BE LOCATED SO AS TO BE PLAINLY VISIBLE TO TRAFFIC.
- MAINTENANCE:** THE CONTRACTOR SHALL KEEP SIGNS CLEANED AND CLEARED AT ALL TIMES. ALL SIGNS SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE MAINTAINED IN GOOD CONDITION FOR THE DURATION OF THE CONTRACT. ALL SIGNS SHALL BE REMOVED FROM THE WORK SITE WHEN THE CONTRACT WORK IS ACCEPTED.

**WORK DURATION DEFINITIONS**

LONG-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.

INTERMEDIATE-TERM STATIONARY IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.

SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

FILE NAME = 619-307-2.dwg  
DATE/TIME = 8/16/2021 10:01:00 AM  
USER = abbas@twright

**1 SHORT DURATION LANE CLOSURE CHARTS**  
C-703 SCALE: NONE CROSS REFERENCE: NONE

**NYS DOT STANDARD GENERAL PLAN NOTES:**

- THE ROADWAY SHALL BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- ROADSIDE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
- MATERIALS, EQUIPMENT AND VEHICLES SHALL NOT BE STORED OR PARKED WITHIN THE NEW YORK STATE RIGHT-OF-WAY.
- WORK ZONE TRAFFIC CONTROL SHALL COMPLY WITH THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT, AND SHALL BE IN ACCORDANCE WITH THE NYS DOT CONTRACT OR HIGHWAY WORK PERMIT DOCUMENTS AND AS DEEMED NECESSARY BY THE NYS ENGINEER IN CHARGE.
- NOTIFY NEW YORK STATE DEPARTMENT OF TRANSPORTATION RESIDENT ENGINEER AT THE APPLICABLE RESIDENCY, THREE WORKING DAYS PRIOR TO WORKING IN THE STATE RIGHT-OF-WAY.
- NOTIFY DIG SAFELY NEW YORK THREE WORKING DAYS PRIOR TO DIGGING, DRILLING OR BLASTING AT 1-800-962-7962, FOR A UTILITY STAKE-OUT.
- ALL WORK CONTEMPLATED AND MATERIALS USED WITHIN THE NYS RIGHT-OF-WAY SHALL BE COVERED BY AND IN CONFORMITY WITH THE NYS DEPARTMENT OF TRANSPORTATION MAY 1, 2008 SPECIFICATIONS BOOK AND ANY SUBSEQUENT ADDENDA ALONG WITH ANY APPROPRIATE CURRENT NYS DEPARTMENT OF TRANSPORTATION STANDARD SHEETS, EXCEPT AS MODIFIED IN THESE PLANS AND IN THE ITEMIZED PROPOSAL. METRIC UNITS MAY BE CONVERTED TO ENGLISH.
- QUALITY CONTROL OF ASPHALT CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 402 OF THE STANDARD SPECIFICATIONS. ASPHALT COURSE DEPTHS SHOWN ON THE PLANS ARE COMPACTED DEPTHS.
- NO NIGHT WORK WILL BE ALLOWED UNLESS PRIOR APPROVAL IS GIVEN BY THE DEPARTMENT. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC WILL BE REQUIRED INCLUDING THE ADDITION OF REFLECTIVE MATERIALS AND LIGHTING.
- HAZARDOUS WASTE NOTIFICATION - THE PERMITTEE ACCEPTS THE RIGHT-OF-WAY OF THE STATE HIGHWAY IN ITS' AS IS CONDITION. THE DEPARTMENT OF TRANSPORTATION MAKES NO REPRESENTATION AS TO THE ABSENCE OF UNDERGROUND TANKS, STRUCTURES, FEATURES OR SIMILAR IMPEDIMENTS TO THE COMPLETION OF THE WORK PERMITTED HEREUNDER. SHOULD PERMITTEE FIND SOME PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS TO ITS WORK, THE DEPARTMENT OF TRANSPORTATION SHALL HAVE NO OBLIGATION TO CURE, REMOVE, REMEDY OR OTHERWISE DEAL WITH SUCH PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS. THE DEPARTMENT WILL PERMIT THE PERMITTEE TO REMOVE, MODIFY OR OTHERWISE DEAL WITH SUCH UNDERGROUND TANKS, STRUCTURE FEATURE OR IMPEDIMENT IF SUCH IS DONE IN A MANNER WHICH MEETS ACCEPTABLE ENGINEERING PRACTICE AND IS PRE-APPROVED BY THE DEPARTMENT OF TRANSPORTATION. SHOULD PERMITTEE DETERMINE THAT SUCH UNFORESEEN UNDERGROUND IMPEDIMENT RENDERS PERMITTEES WORK AS AUTHORIZED BY THIS PERMIT UNFEASIBLE, PERMITTEE SHALL HAVE THE OPTION OF RESTORING THE HIGHWAY TO ITS ORIGINAL CONDITION AND NOT PERFORMING SUCH WORK.
- OPEN CUTTING OF THE ROADWAY SHALL NOT BE ALLOWED UNLESS PERMISSION IS GRANTED IN WRITING, BY THE REGIONAL TRAFFIC ENGINEER.

**TEMPORARY LANE/SOULDER CLOSURE RESTRICTIONS FOR HOLIDAYS 2023**

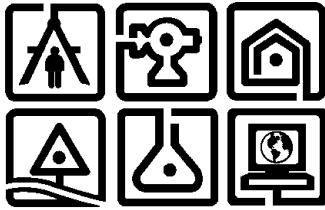
HOLIDAY	FALLS ON	TEMPORARY LAND CLOSURES ARE NOT ALLOWED FROM
NEW YEAR'S DAY	SUNDAY JANUARY 1	BEGINNING 6 AM FRIDAY DECEMBER 30, 2022, AND ENDING 6 AM MONDAY JANUARY 2, 2023
MEMORIAL DAY	MONDAY MAY 29	BEGINNING 6 AM FRIDAY MAY 27, 2023, AND ENDING 6 AM TUESDAY MAY 30, 2023
INDEPENDENCE DAY	TUESDAY JULY 4	BEGINNING 6 AM FRIDAY JUNE 30, 2023, AND ENDING 6 AM WEDNESDAY JULY 5, 2023
LABOR DAY	MONDAY SEPTEMBER 4	BEGINNING 6 AM FRIDAY SEPTEMBER 1, 2023, AND ENDING 6 AM TUESDAY SEPTEMBER 5, 2023
THANKSGIVING DAY	THURSDAY NOVEMBER 23	BEGINNING 6 AM WEDNESDAY NOVEMBER 23, 2023, AND ENDING 6 AM MONDAY NOVEMBER 27, 2023
CHRISTMAS DAY	MONDAY DECEMBER 25	BEGINNING 6 AM FRIDAY DECEMBER 22, 2023, AND ENDING 6 AM TUESDAY DECEMBER 26, 2023

**PRELIMINARY**

OWEN K. SPEULSTRA P.E. NO. 104125	DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.  © 2023 C.T. MALE ASSOCIATES DESIGNER: MLS DRAFTED : MLS CHECKED : OKS PROJ. NO : 22.2303 SCALE : AS NOTED DATE : MARCH 24, 2023	<b>TRAFFIC AND MAINTENANCE CONTROL DETAILS</b>
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<b>LANSING COMMUNITY SOLAR, LLC</b> <b>GENIE SOLAR ENERGY</b>							
TOWN OF LANSING TOMPKINS COUNTY, NEW YORK							
<b>C.T. MALE ASSOCIATES</b> 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							
<b>C-703</b> SHEET 14 OF 14 DWG. NO: 23-015							



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:*  
 Genie Solar Energy  
 520 Broad Street  
 Newark, NJ 07102

*Prepared by:*  
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*C.T. Male Project No: 22.2303*

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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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APPENDICES

- A. Site Location Mapping
- B. Draft eNOI and General Permit (GP-0-20-001)
- C. Soils Information (Web Soil Survey)
- D. Threatened and Endangered Species Correspondence
- E. Drainage Calculations
- F. Construction Sequencing Plan
- G. Erosion and Sediment Control Plan and Details

**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  $\pm 22.5$  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  $\pm 22.5$  acres of a  $\pm 107.1$ -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  $\pm 22.5$  acres of a  $\pm 107.1$ -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  $\pm 22.5$  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:

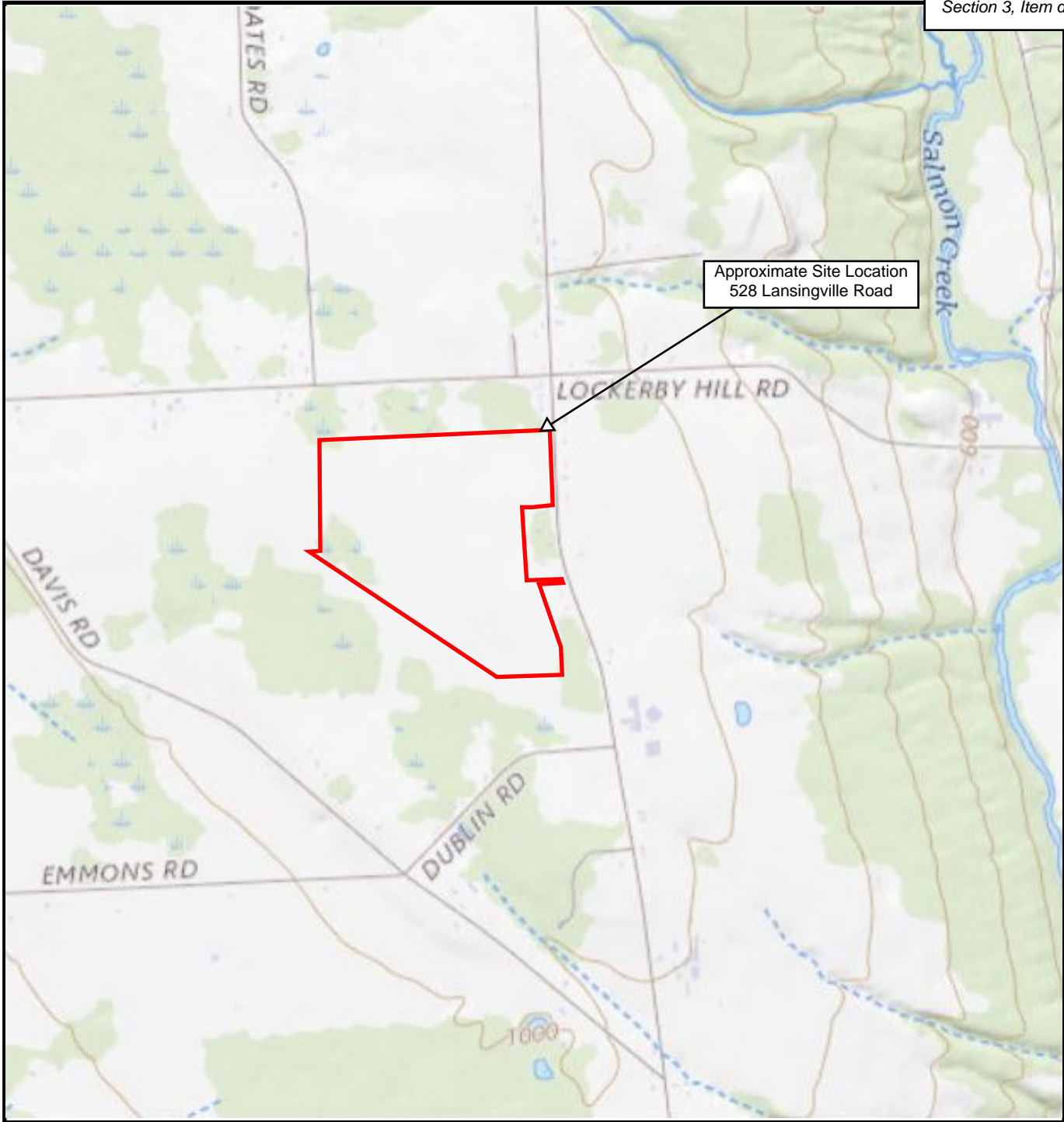
1. Inspect the installed erosion and sediment control measures at the site prior to the start of construction activities.
2. Inspect the site once every seven (7) calendar days during ongoing construction activities.
3. Inspect the site every thirty (30) days where soil disturbance activities have been 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.

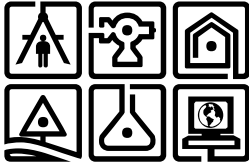
All completed SWPPP inspection forms shall be maintained in the on-site copy of this SWPPP, which shall always remain on the construction site.



**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

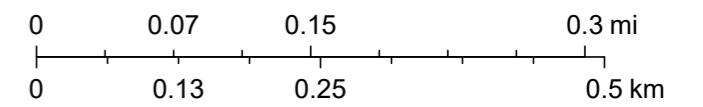


November 7, 2022

### 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

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**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

Handwritten signature of John J. Ferguson over a horizontal line, with the label 'Authorized Signature' below it.

Handwritten date '1-23-20' above a horizontal line.

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

(Part I.B.1)

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

(Part I.B.1.b)

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;



(Part I.B.1.e.iii)

- (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.

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

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

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

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

(Part I.C.2.d)

**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*



(Part I.F.4)

*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.

(Part I.F.8)

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.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:

(Part I.F.8.c)

- (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.



(Part II.B)

## 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, 4<sup>th</sup> Floor  
Albany, New York 12233-3505**

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

## C. Permit Authorization

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

(Part II.C.2.b)

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.

(Part II.C.3.b)

- 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*



(Part II.D.3)

*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

(Part II.D.6)

*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*

(Part II.F.3)

*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;



(Part III.A.4.b)

- 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

(Part III.A.6)

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

(Part III.B.1.b)

- 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



(Part III.B.1.i)

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;

(Part III.B.2.b)

- 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.

(Part III.B.3)

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



(Part IV.B.1)

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

(Part IV.C.1.a)

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.

(Part IV.C.2.d)

- 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:



(Part IV.C.4.a)

- 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

(Part IV.C.4.I)

- 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;

(Part V.A.2.b)

- 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,



(Part V.A.5.b)

- 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

(Part VII.A)

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

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

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

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

### **C. Enforcement**

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

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

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

(Part VII.E)

### **E. Duty to Mitigate**

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

### **F. Duty to Provide Information**

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

### **G. Other Information**

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

### **H. Signatory Requirements**

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



(Part VII.H.1.a)

- (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,

(Part VII.H.2.b)

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

(Part VII.K.1)

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



(Part VII.M.3)

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.

(Part VII.R)

**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><b>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</b></p> <ul style="list-style-type: none"><li>• 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</li><li>• 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</li><li>• Construction of a barn or other <i>agricultural building</i>, silo, stock yard or pen.</li></ul>
<p><b>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</b></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><b>The following construction activities that involve soil disturbances of one (1) or more acres of land:</b></p> <ul style="list-style-type: none"><li>• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains</li><li>• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects</li><li>• Pond construction</li><li>• Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover</li><li>• Cross-country ski trails and walking/hiking trails</li><li>• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;</li><li>• 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.</li><li>• Slope stabilization projects</li><li>• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics</li></ul>



**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**

<p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land:</b></p> <ul style="list-style-type: none"><li>• Single family home located in one of the watersheds listed in Appendix C or <i>directly discharging</i> to one of the 303(d) segments listed in Appendix E</li><li>• Single family home that disturbs five (5) or more acres of land</li><li>• Single family residential subdivisions located in one of the watersheds listed in Appendix C or <i>directly discharging</i> to one of the 303(d) segments listed in Appendix E</li><li>• 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</li><li>• 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</li><li>• Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks</li><li>• Airports</li><li>• Amusement parks</li><li>• Breweries, cideries, and wineries, including establishments constructed on agricultural land</li><li>• Campgrounds</li><li>• Cemeteries that include the construction or reconstruction of impervious area (&gt;5% of disturbed area) or <i>alter the hydrology from pre to post development</i> conditions</li><li>• Commercial developments</li><li>• Churches and other places of worship</li><li>• Construction of a barn or other <i>agricultural building</i> (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of <i>impervious area</i>, excluding projects that involve soil disturbances of less than five acres.</li><li>• Golf courses</li><li>• Institutional development; includes hospitals, prisons, schools and colleges</li><li>• Industrial facilities; includes industrial parks</li><li>• Landfills</li><li>• Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks</li><li>• Office complexes</li><li>• Playgrounds that include the construction or reconstruction of impervious area</li><li>• Sports complexes</li><li>• Racetracks; includes racetracks with earthen (dirt) surface</li><li>• Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1</li></ul>
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**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

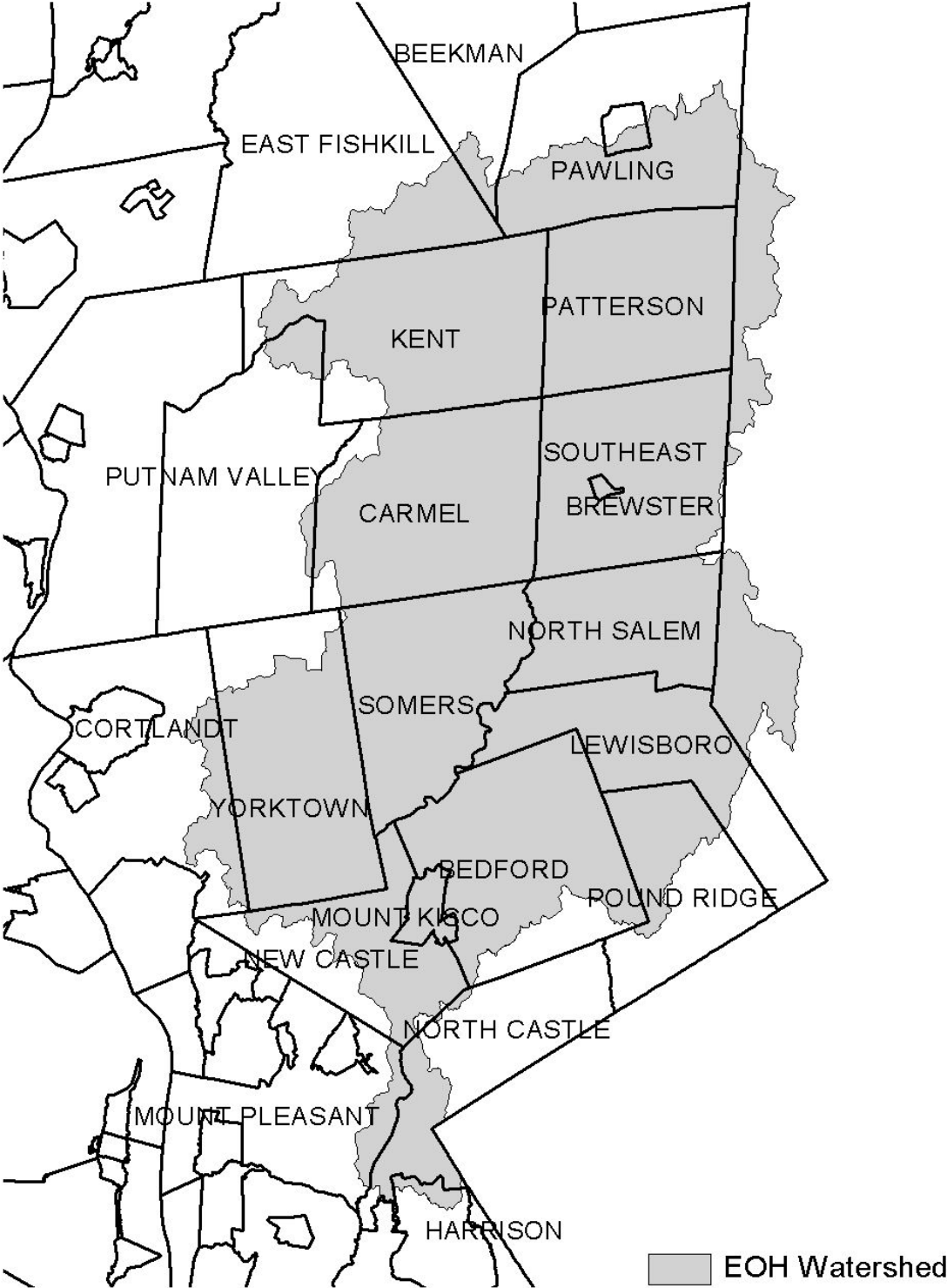


**APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal**

**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**

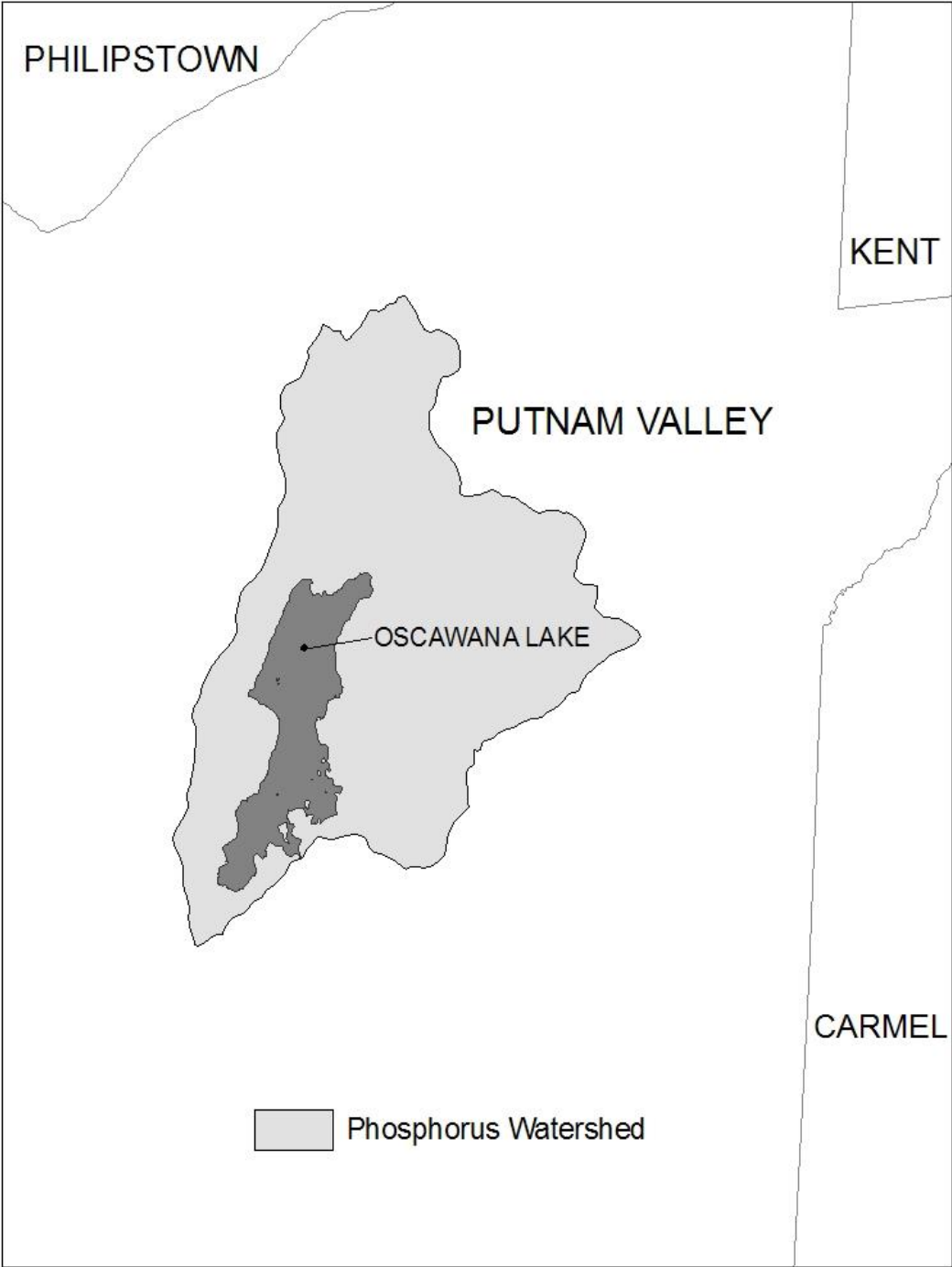




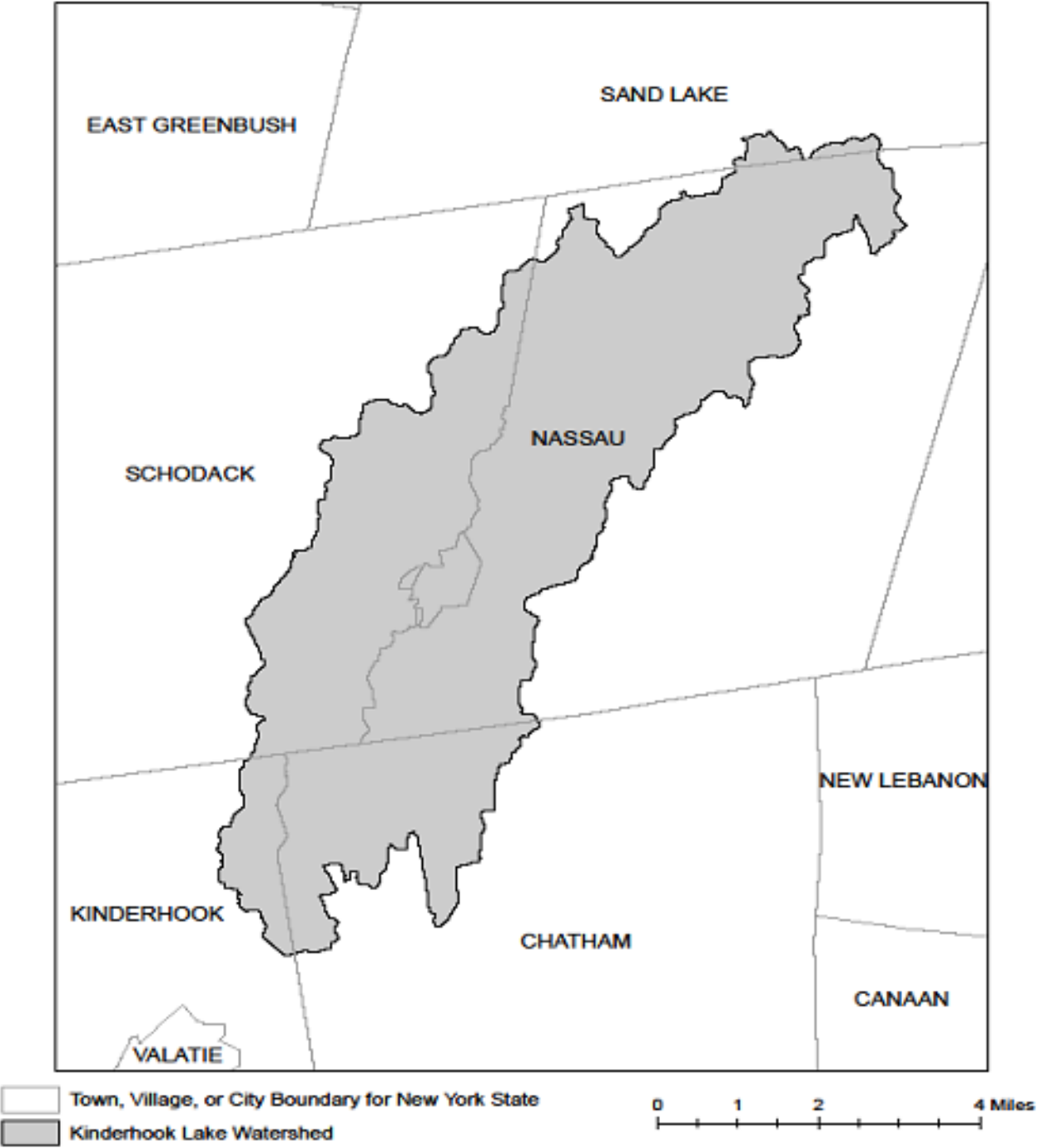
**Figure 3 - Greenwood Lake Watershed**



**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**

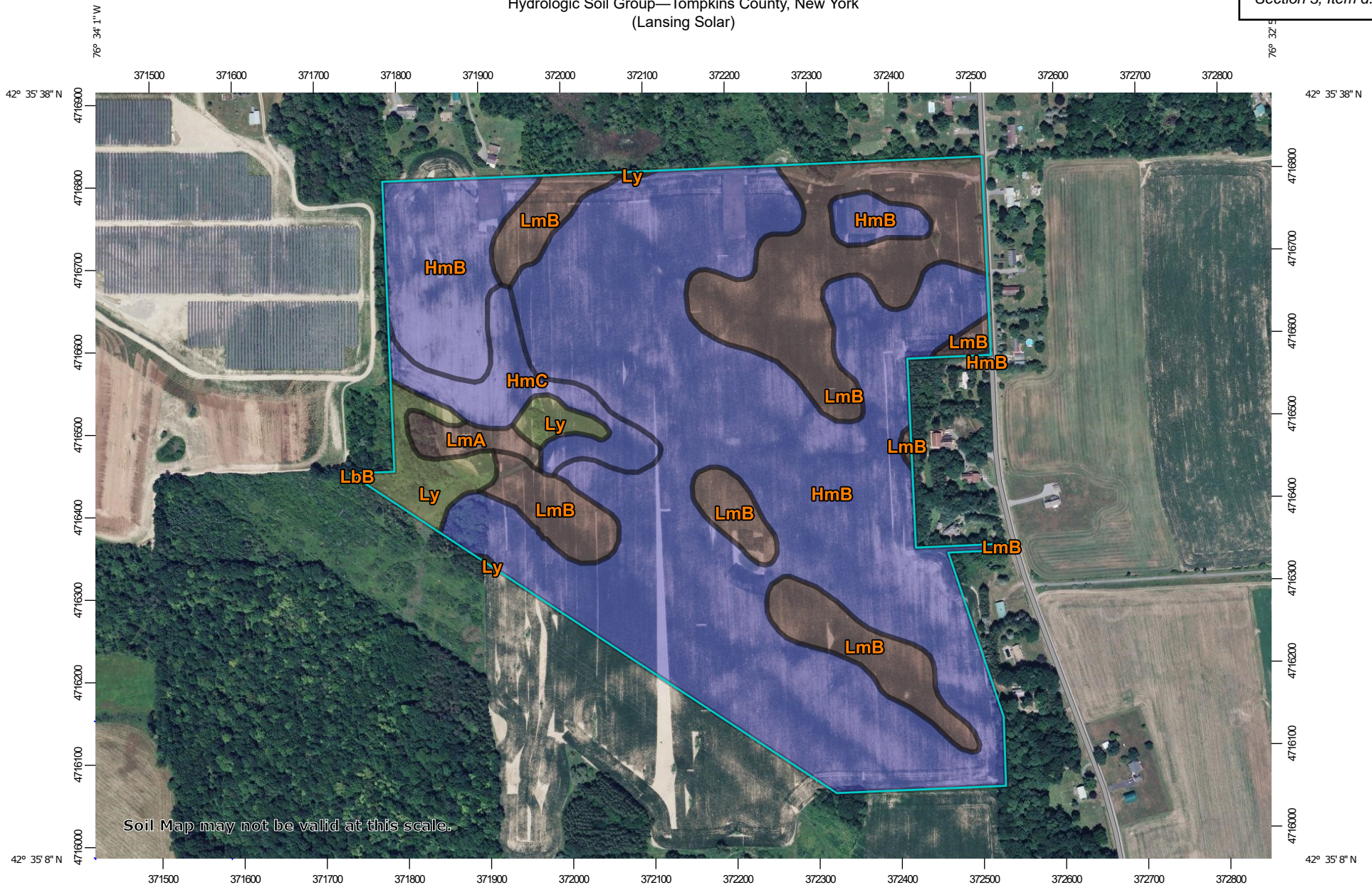
<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (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)

Section 3, Item d.



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

0 50 100 200 300 Meters

0 300 600 1200 1800 Feet

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



































Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

2/27/2023  
Page 1 of 4

### 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
- Water Features**
  -  Streams and Canals
- Transportation**
  -  Rails
  -  Interstate Highways
  -  US Routes
  -  Major Roads
  -  Local Roads
- Background**
  -  Aerial Photography
- Other**
  -  C
  -  C/D
  -  D
  -  Not rated or not available

### 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%
<b>Totals for Area of Interest</b>			<b>107.3</b>	<b>100.0%</b>



## 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](mailto: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 Fisheries<sup>1</sup>, 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: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Insects

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

### Critical habitats

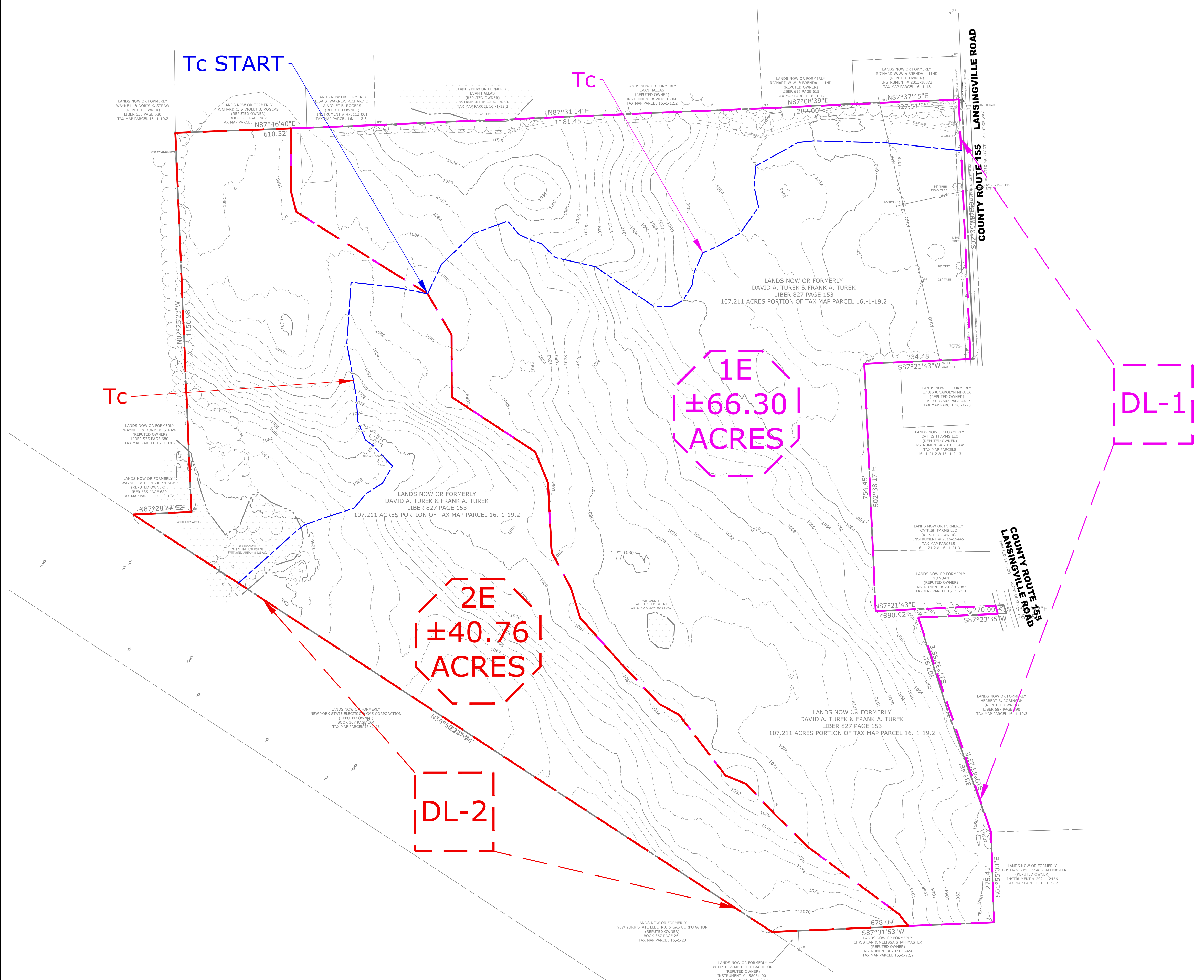
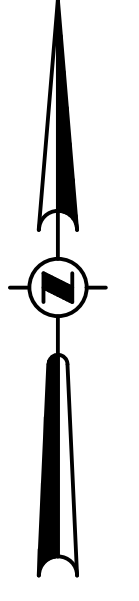
THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **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-1, DL-2



DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.

**EXISTING DRAINAGE CONDITIONS**

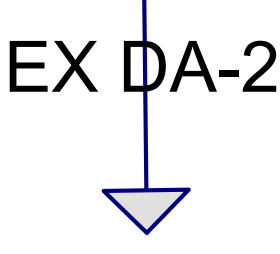
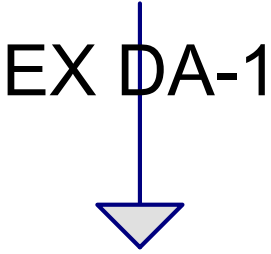
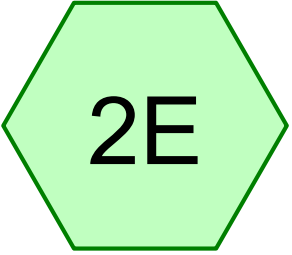
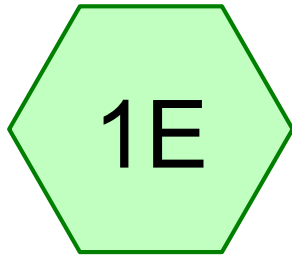
**LANSING COMMUNITY SOLAR PROJECT, LLC.**  
**GENIE SOLAR ENERGY**

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

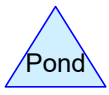
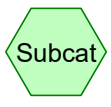
**DRE**  
 SHEET 1 OF 1  
 DWG. NO:

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



**Routing Diagram for Existing Conditions - Lansing Solar**  
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**Existing 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



**Existing Conditions - Lansing Solar**

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**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"

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>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**

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

Prepared by C T Male Associates

Printed 3/7/2023

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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

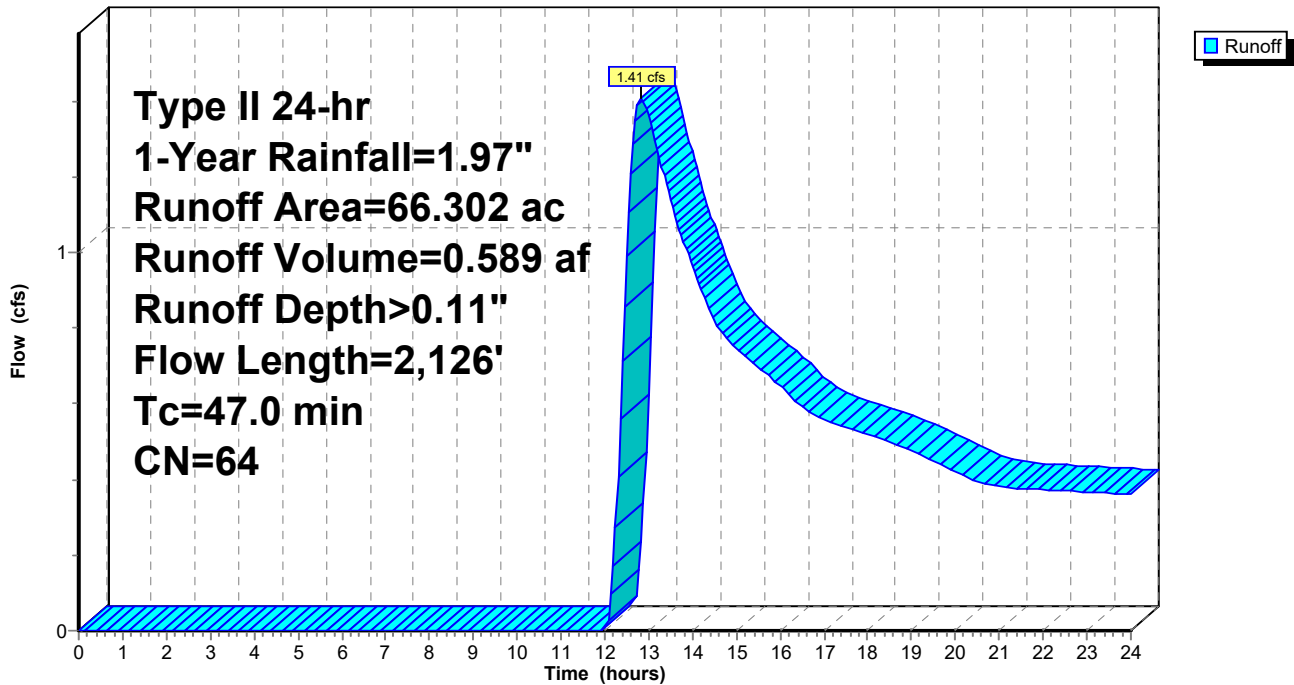
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 1-Year Rainfall=1.97"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

**Subcatchment 1E: EX DA-1**

Hydrograph





**Existing Conditions - Lansing Solar**

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

Prepared by C T Male Associates

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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

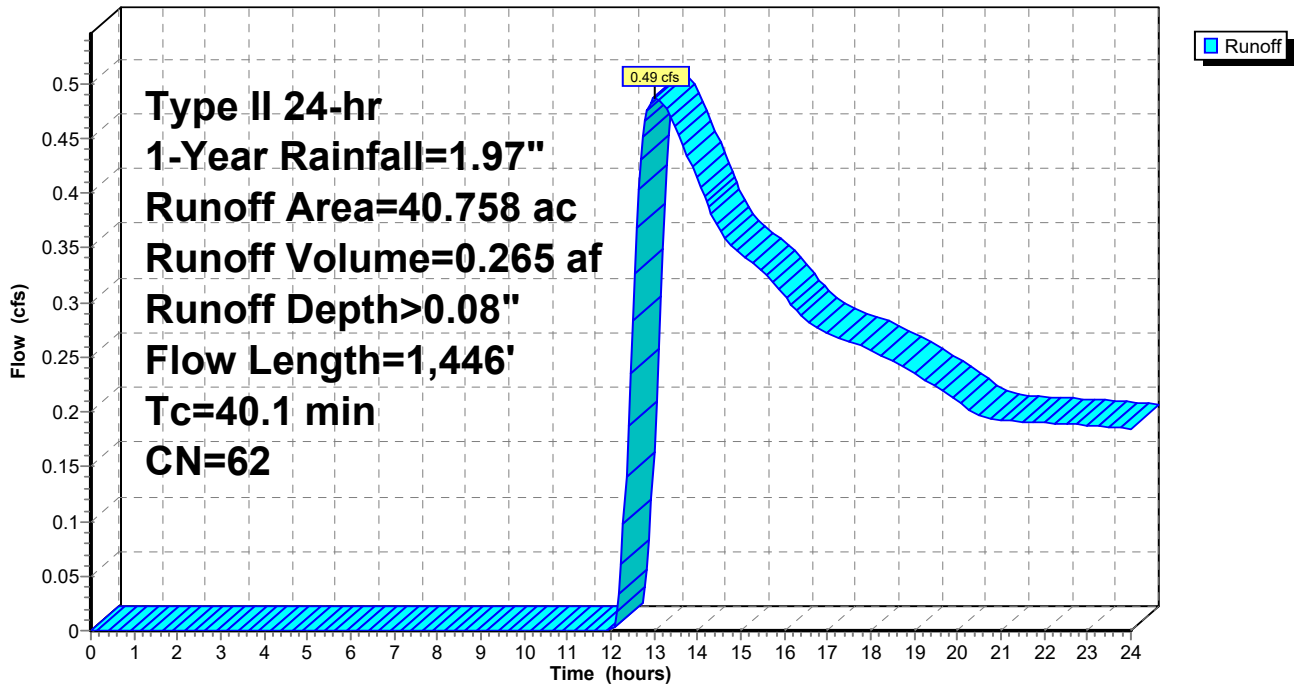
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 1-Year Rainfall=1.97"

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		<b>Sheet Flow, 100-ft Sheet Flow</b> Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b> 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 1-Year Rainfall=1.97"

Prepared by C T Male Associates

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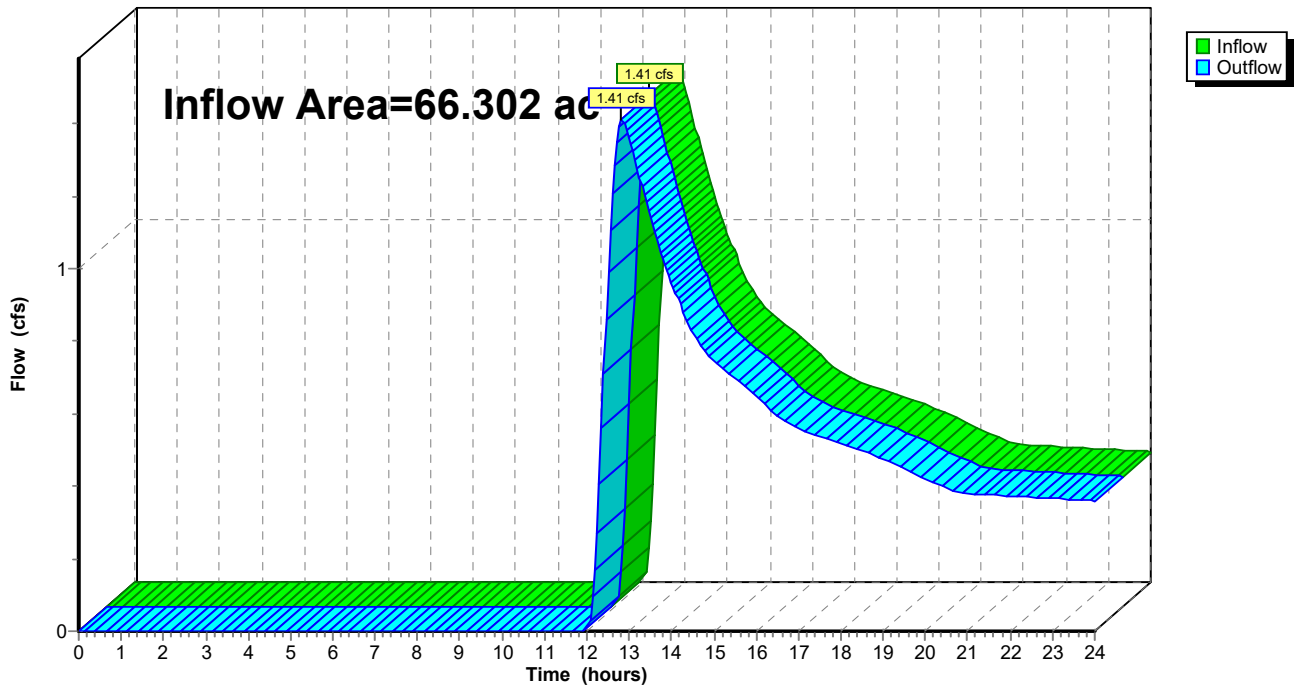
### Summary for Reach DL-1: DL-1

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

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

Prepared by C T Male Associates

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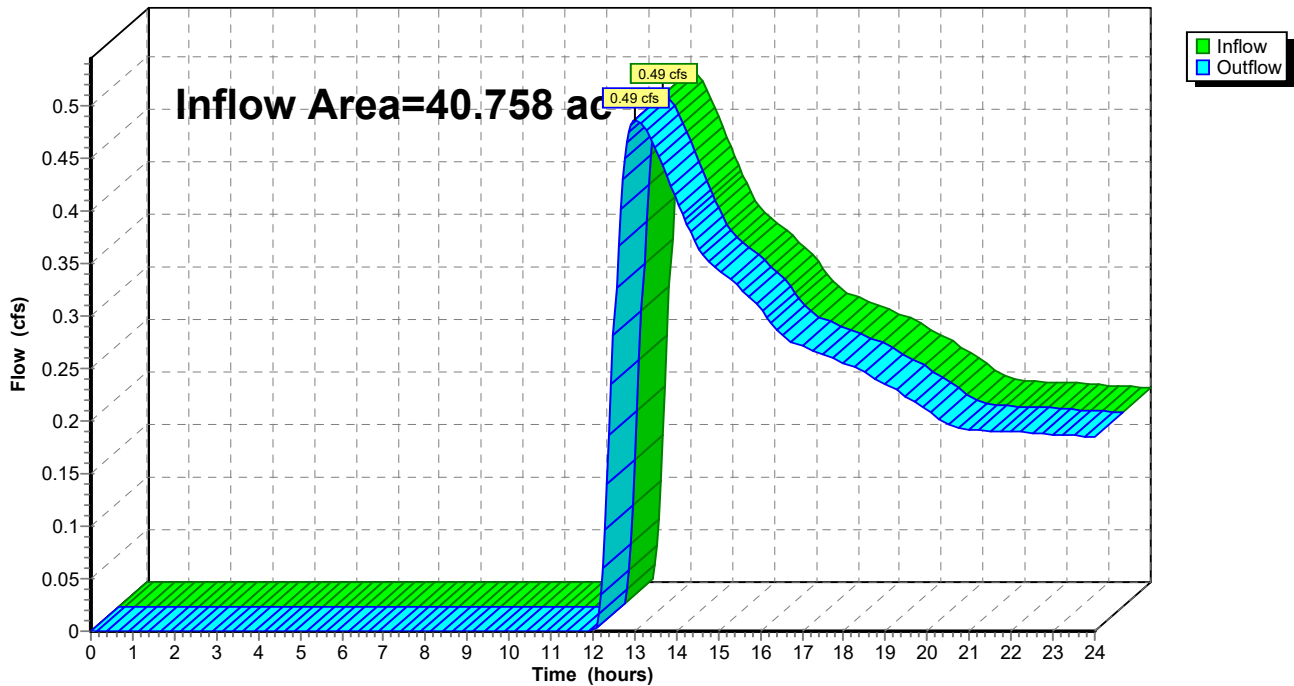
### Summary for Reach DL-2: DL-2

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**

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

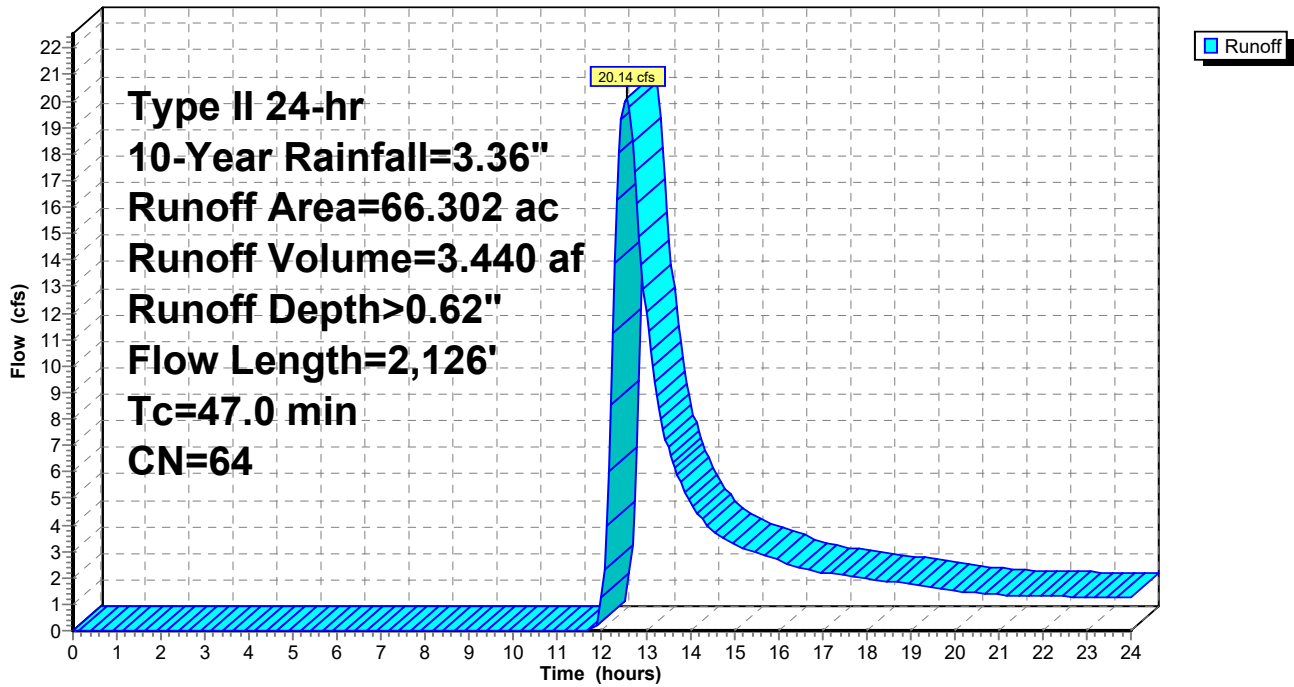
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-Year Rainfall=3.36"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

**Subcatchment 1E: EX DA-1**

Hydrograph



**Existing Conditions - Lansing Solar**

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

Prepared by C T Male Associates

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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

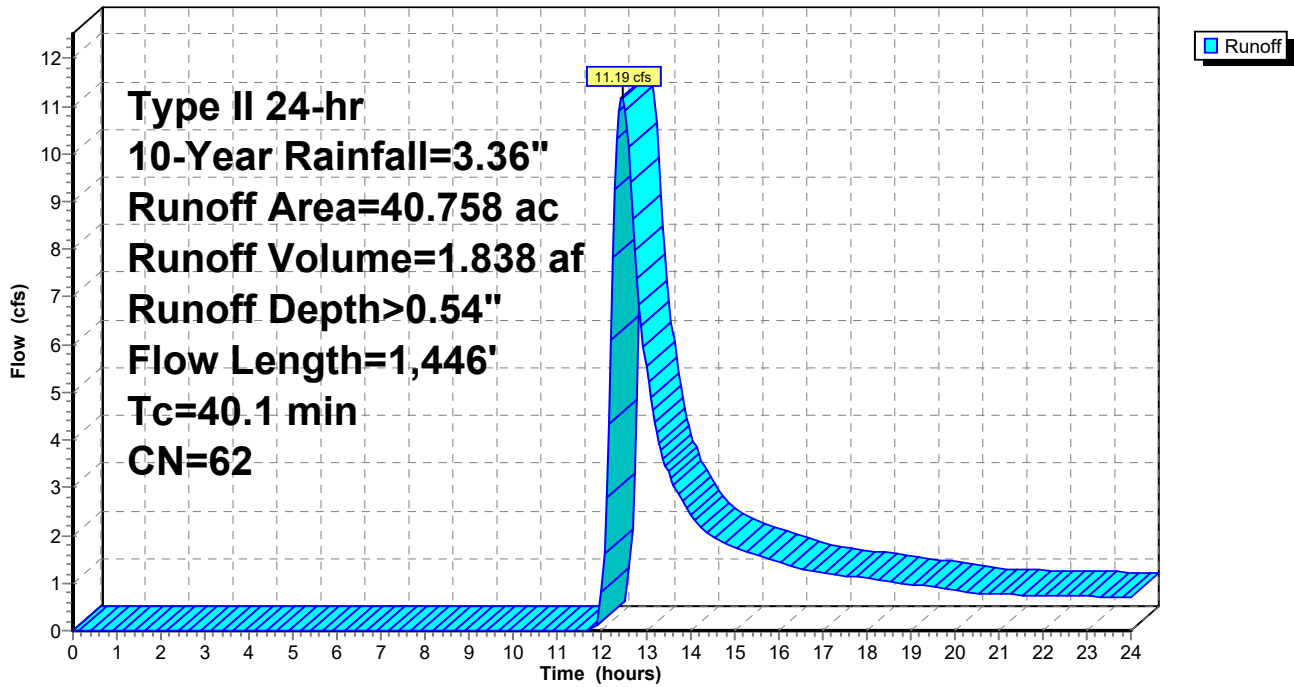
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-Year Rainfall=3.36"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					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 10-Year Rainfall=3.36"

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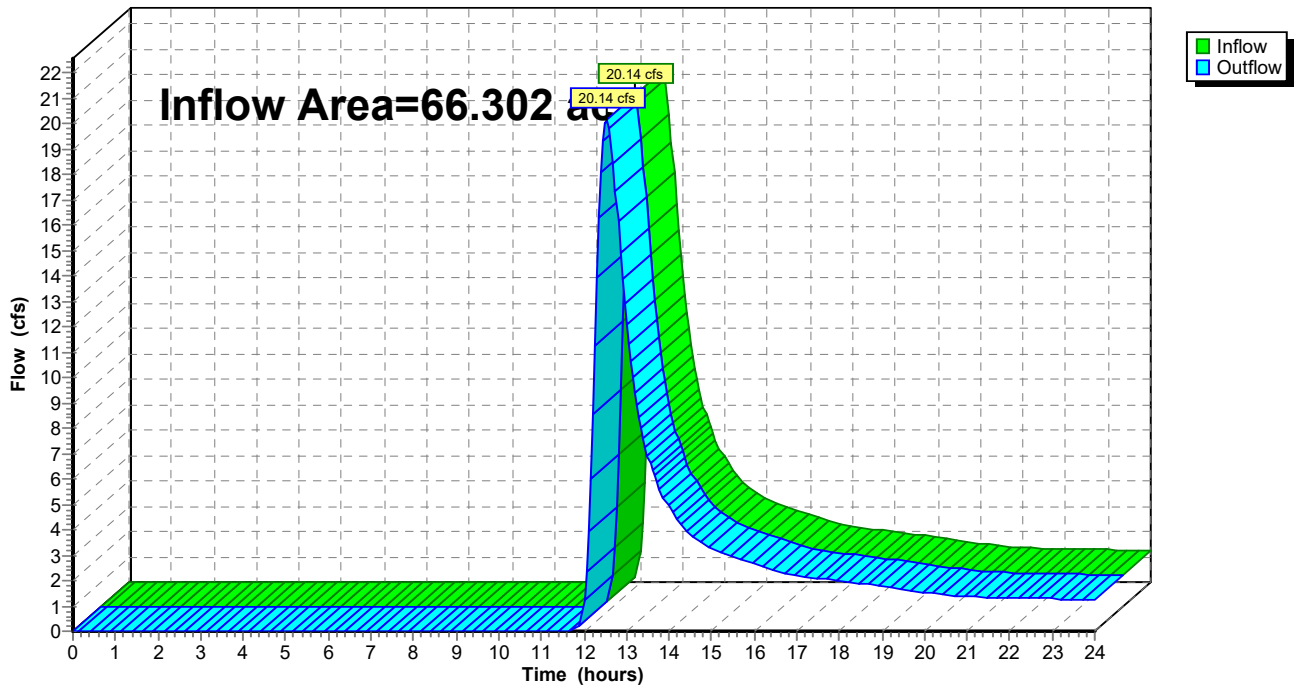
### Summary for Reach DL-1: DL-1

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**

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

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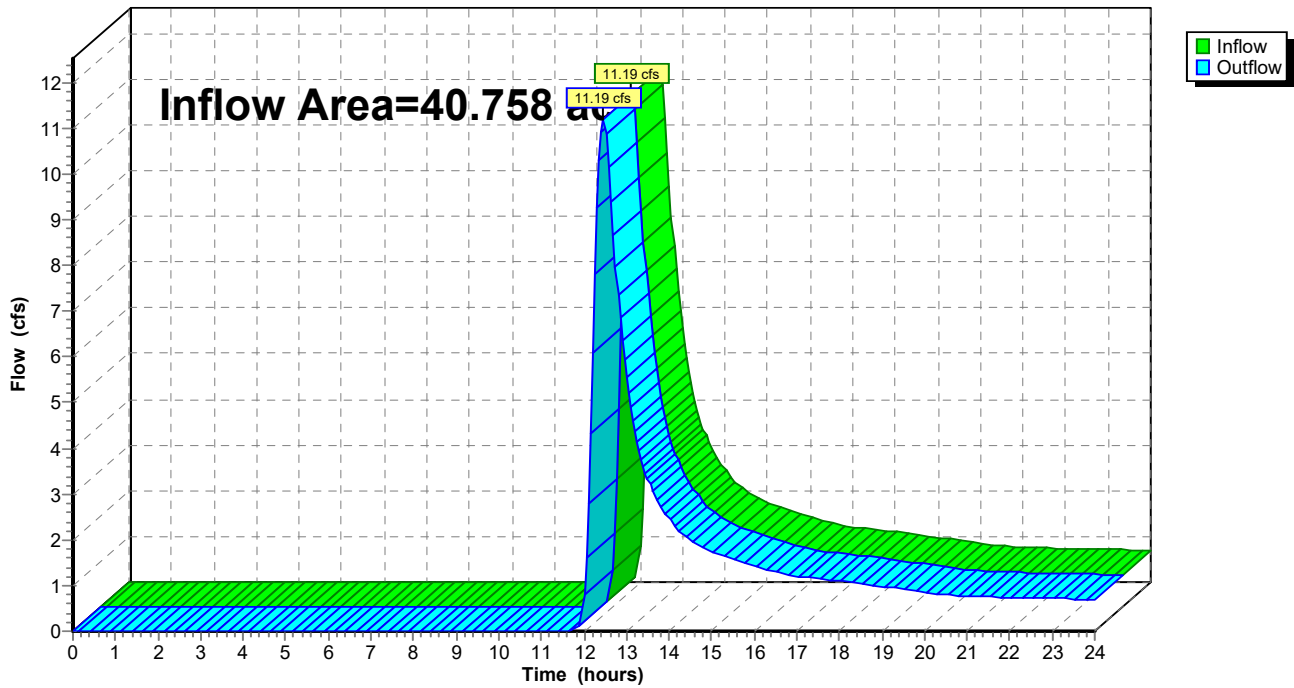
**Summary for Reach DL-2: DL-2**

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"

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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

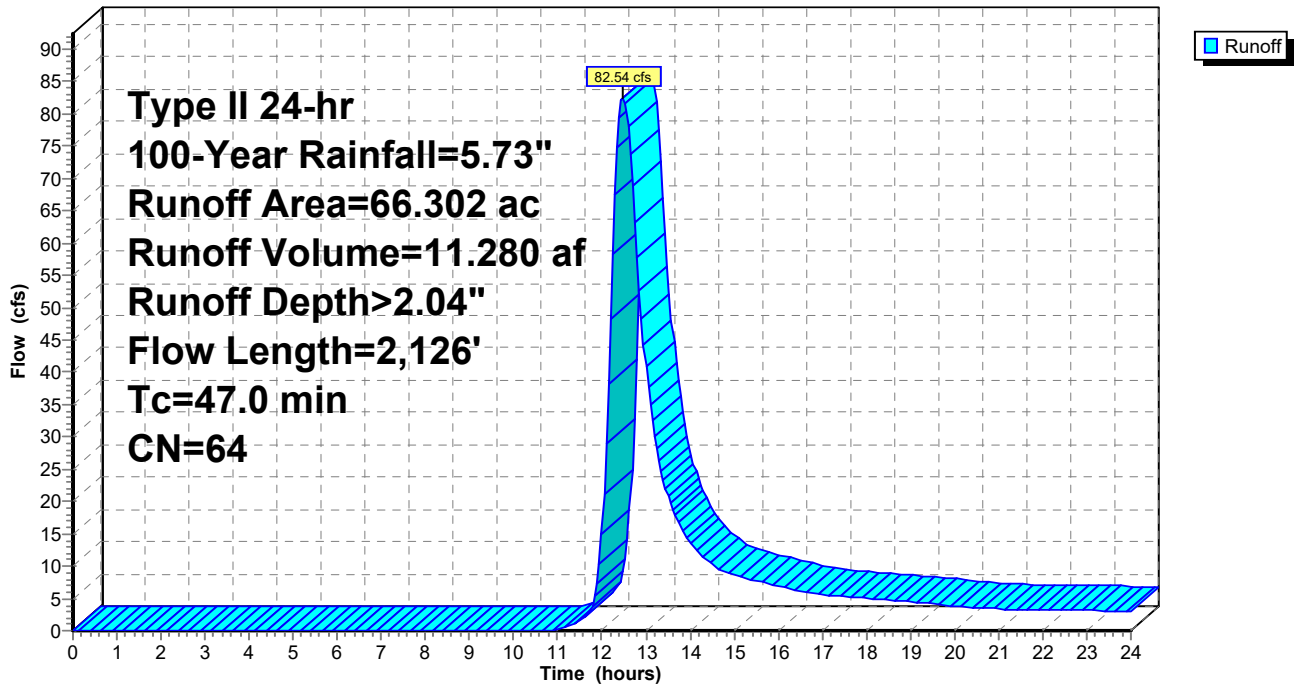
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-Year Rainfall=5.73"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					Short Grass Pasture Kv= 7.0 fps
47.0	2,126	Total			

**Subcatchment 1E: EX DA-1**

Hydrograph



**Existing Conditions - Lansing Solar**

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

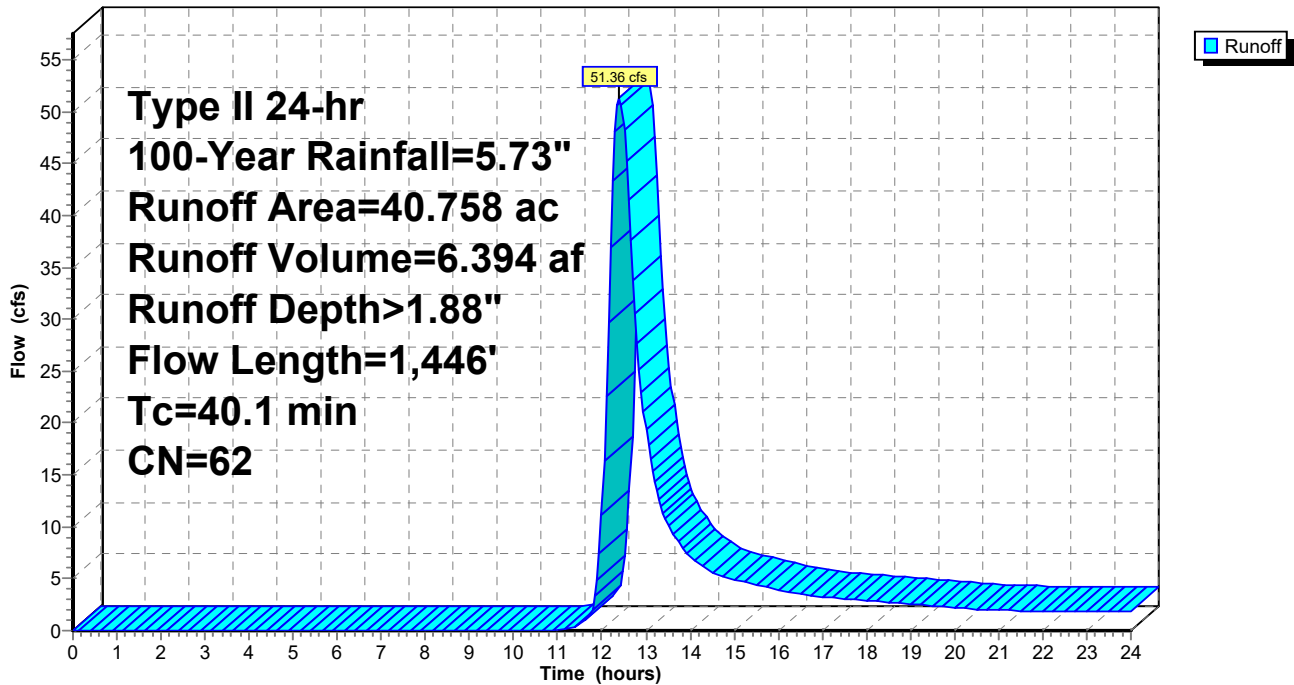
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-Year Rainfall=5.73"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					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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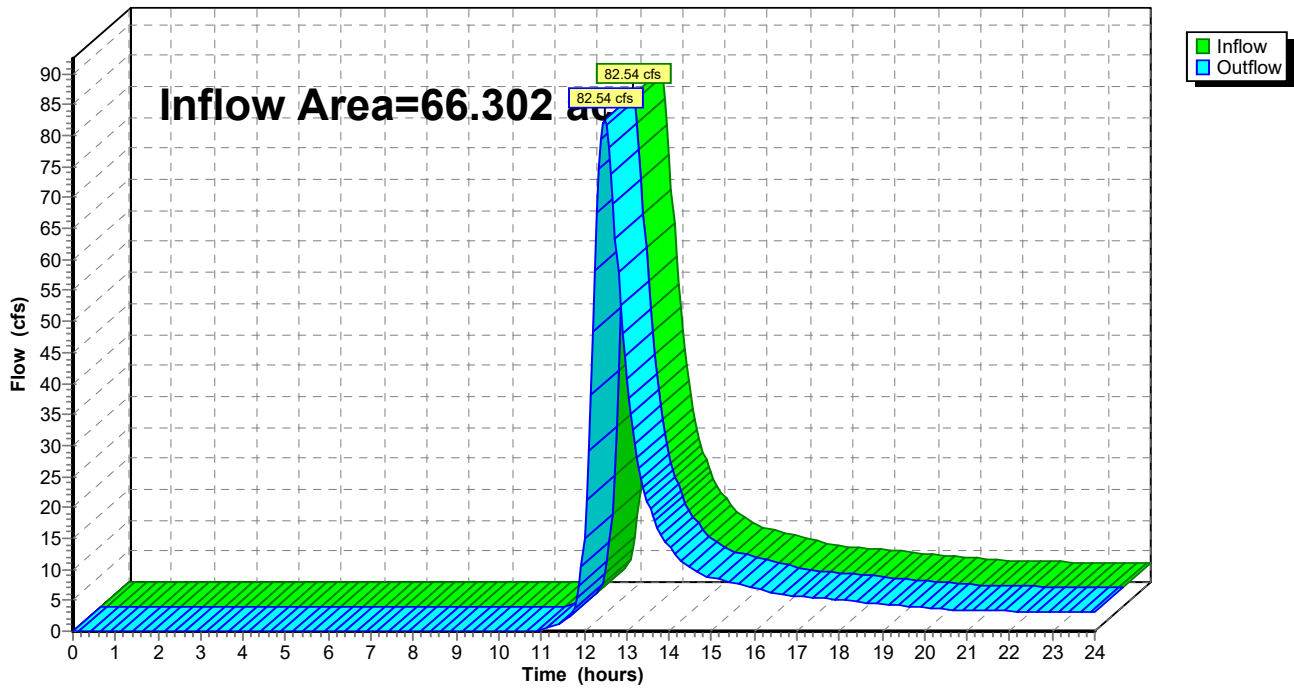
### Summary for Reach DL-1: DL-1

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

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

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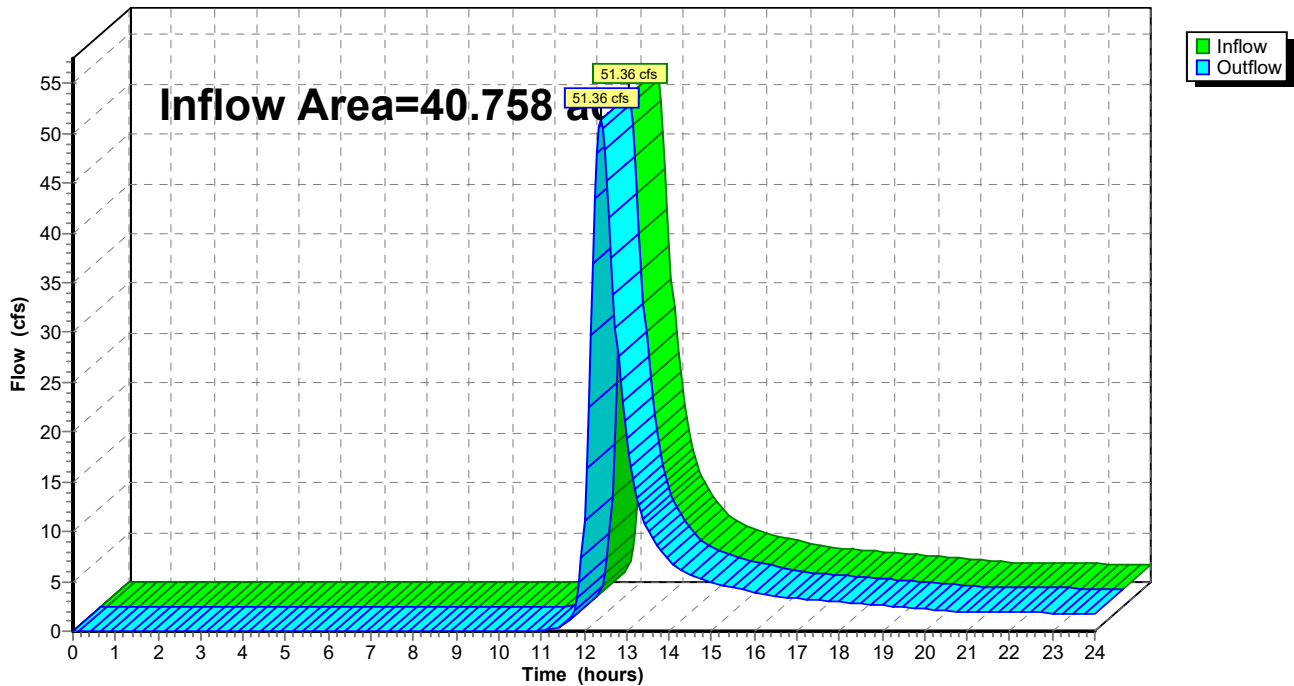
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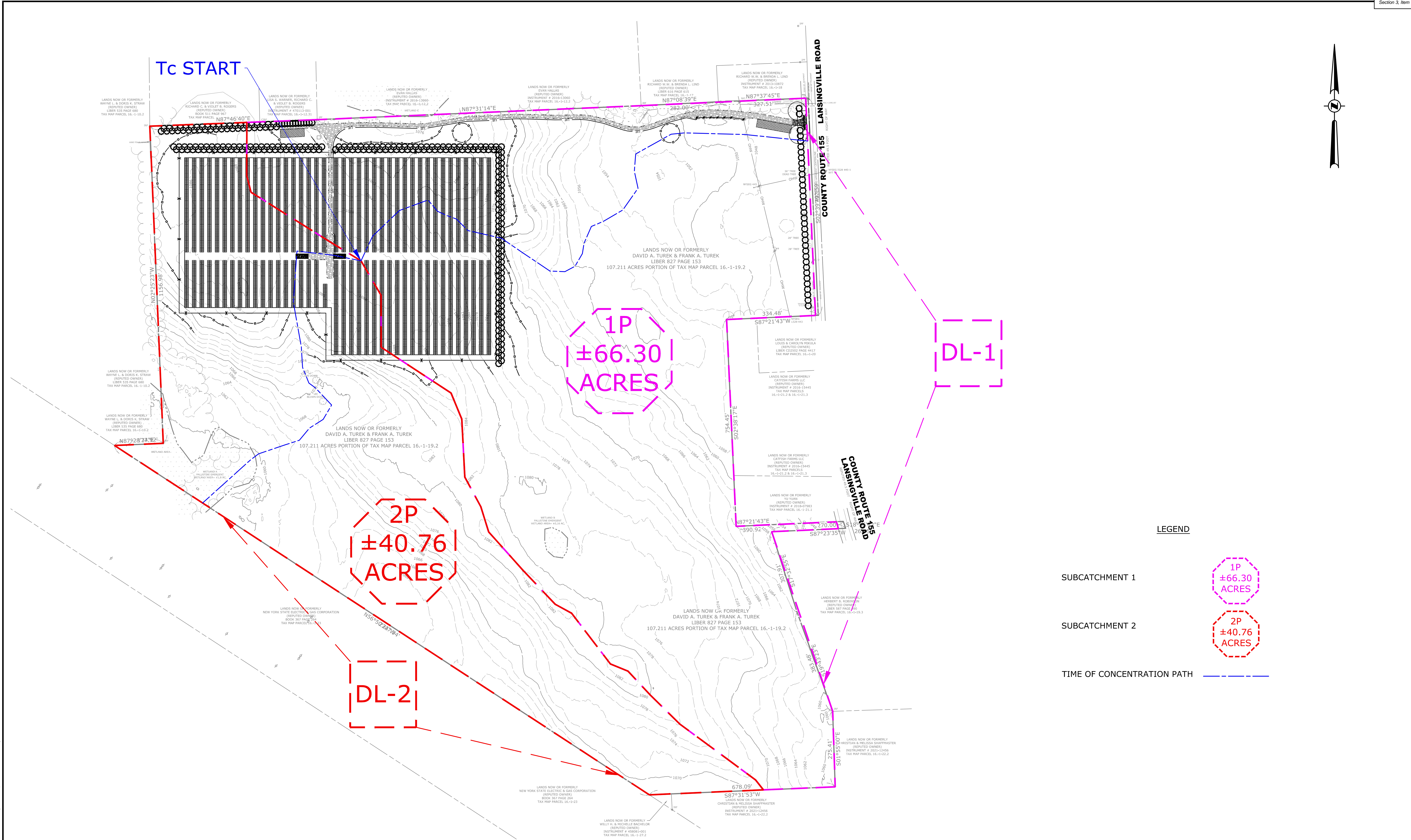
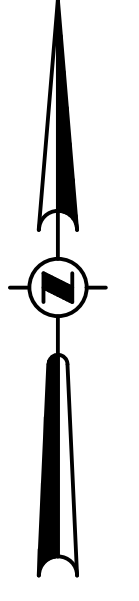
Inflow Area = 40.758 ac, 0.00% Impervious, Inflow Depth > 1.88" for 100-Year event  
Inflow = 51.36 cfs @ 12.40 hrs, Volume= 6.394 af  
Outflow = 51.36 cfs @ 12.40 hrs, Volume= 6.394 af, Atten= 0%, Lag= 0.0 min

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.

**PROPOSED DRAINAGE CONDITIONS**

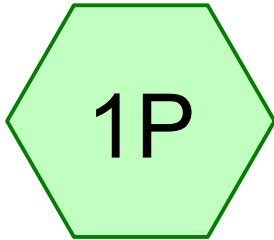
**LANSING COMMUNITY SOLAR PROJECT, LLC.**  
**GENIE SOLAR ENERGY**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**  
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.  
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CHECKED: MLS  
PROJ. NO : 22.2303  
SCALE : 1"=150'  
DATE : MARCH 23, 2023



PR DA-1



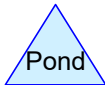
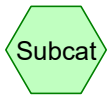
DL-1



PR DA-2



DL-2



**Routing Diagram for Proposed Conditions - Lansing Solar**  
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**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

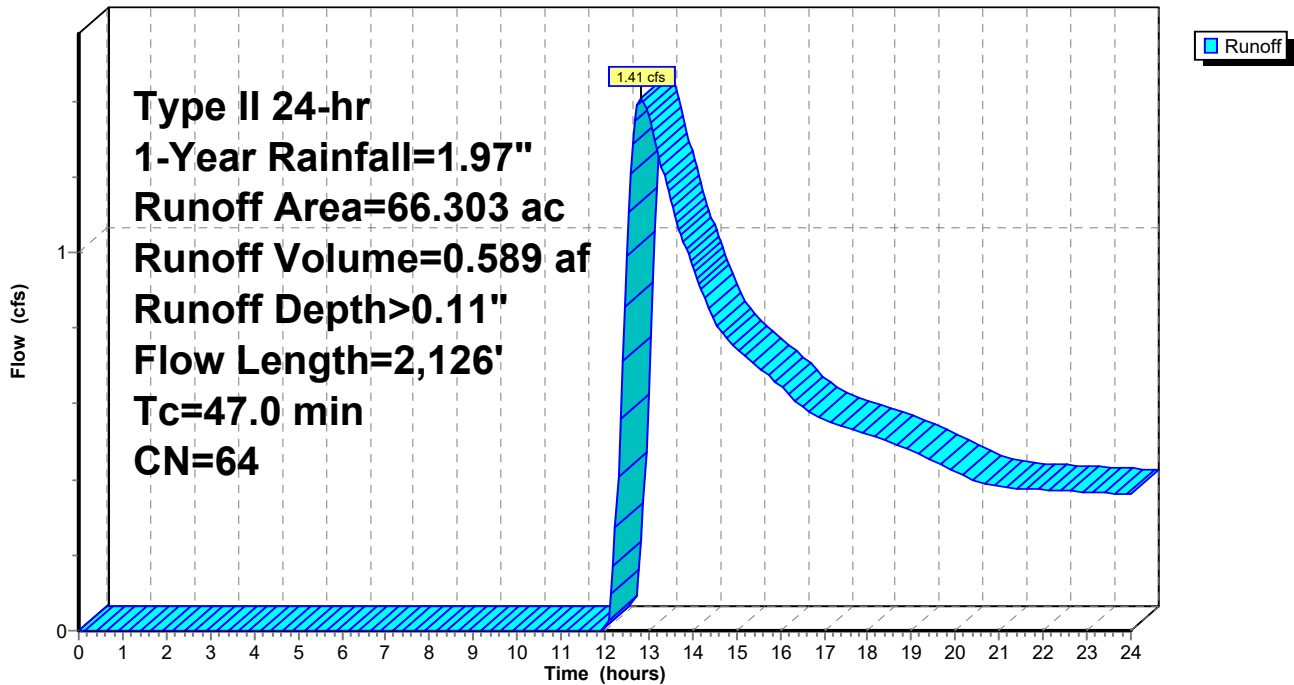
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 1-Year Rainfall=1.97"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					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

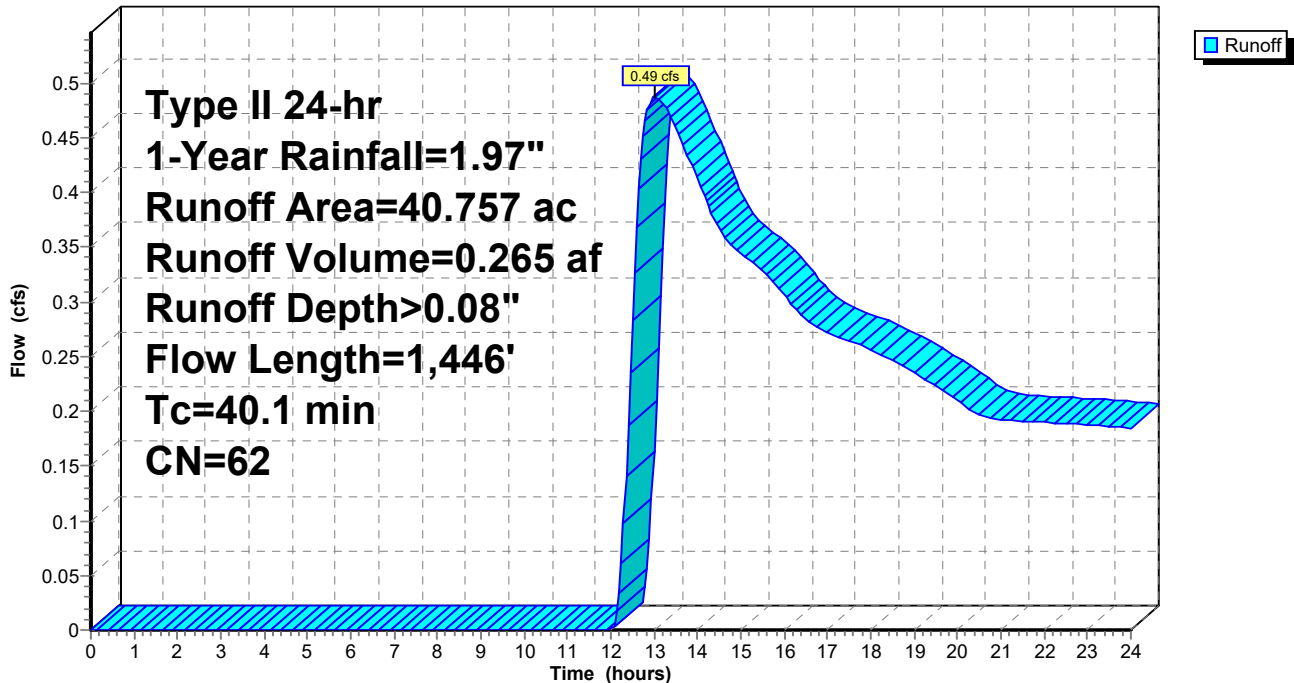
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 1-Year Rainfall=1.97"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

**Subcatchment 2P: PR DA-2**

Hydrograph



**Proposed Conditions - Lansing Solar**

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

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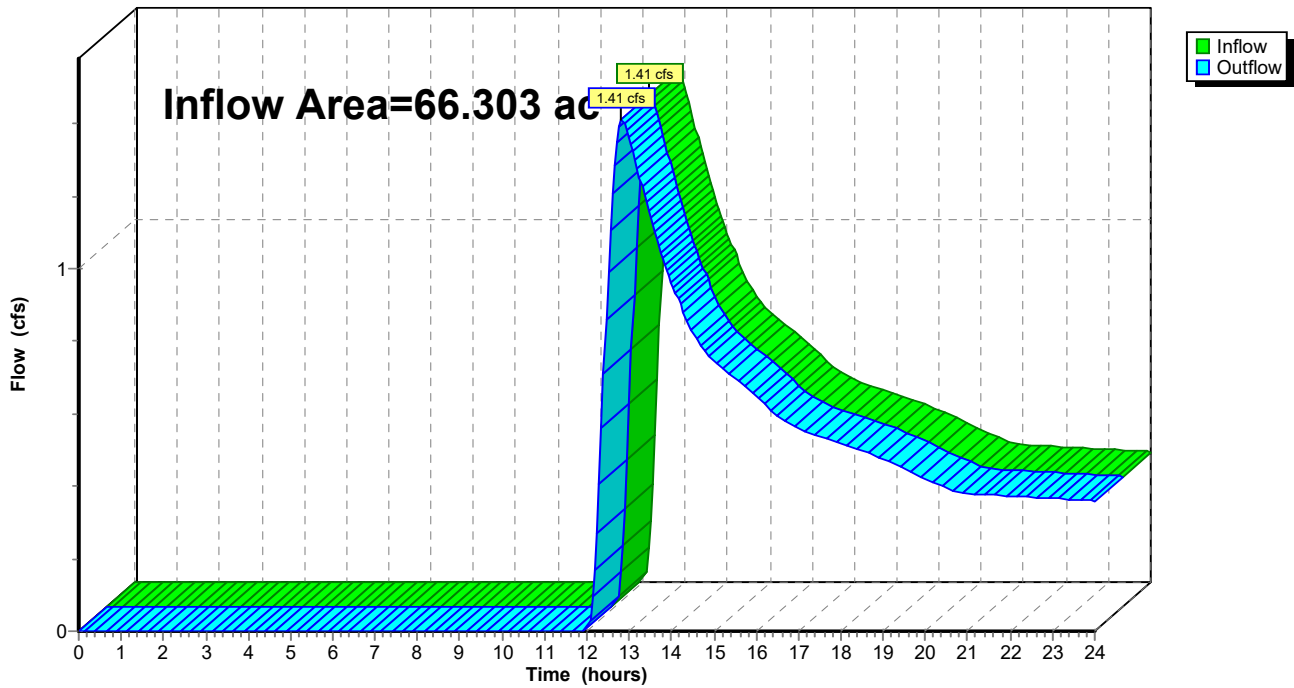
**Summary for Reach DL-1: DL-1**

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

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

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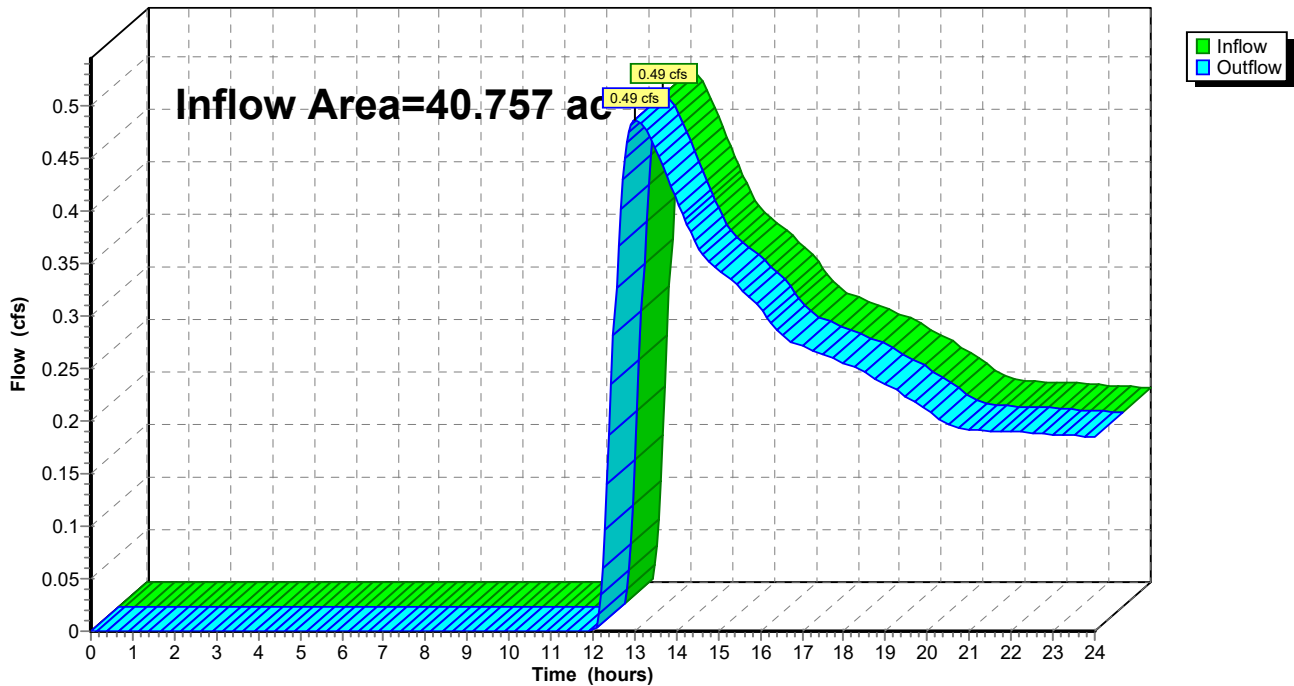
### Summary for Reach DL-2: DL-2

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"

Prepared by C T Male Associates

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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

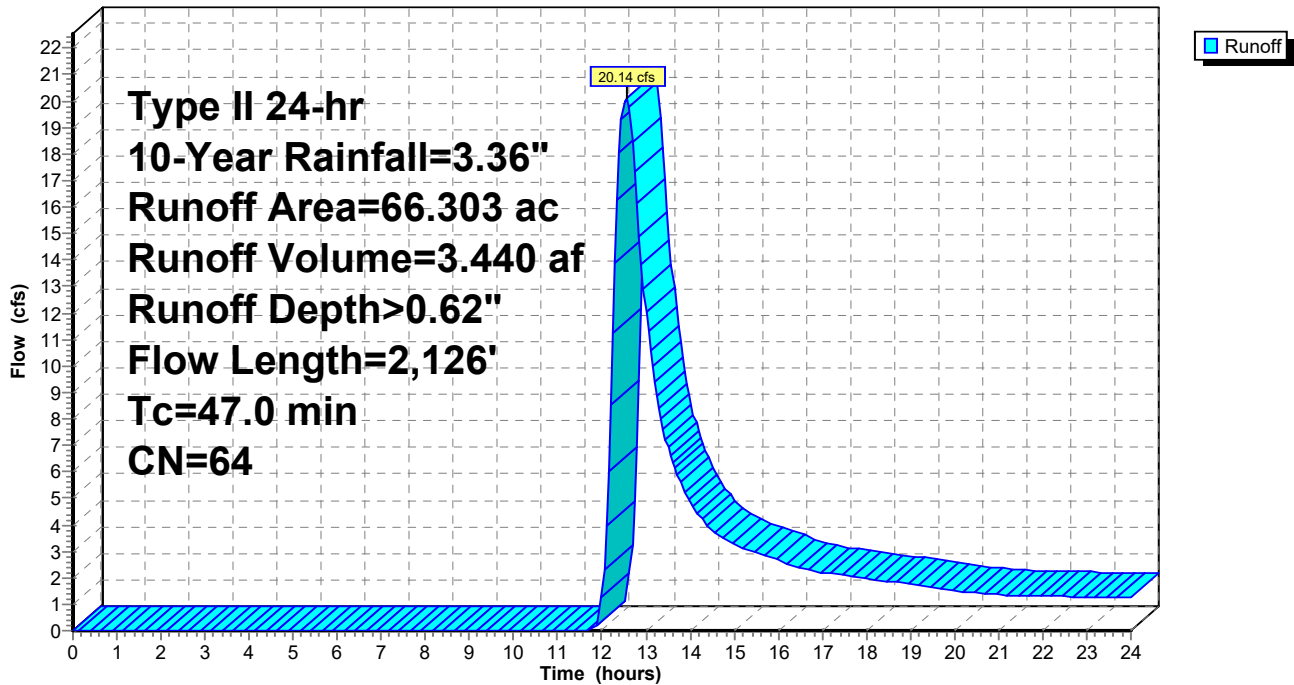
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-Year Rainfall=3.36"

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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					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

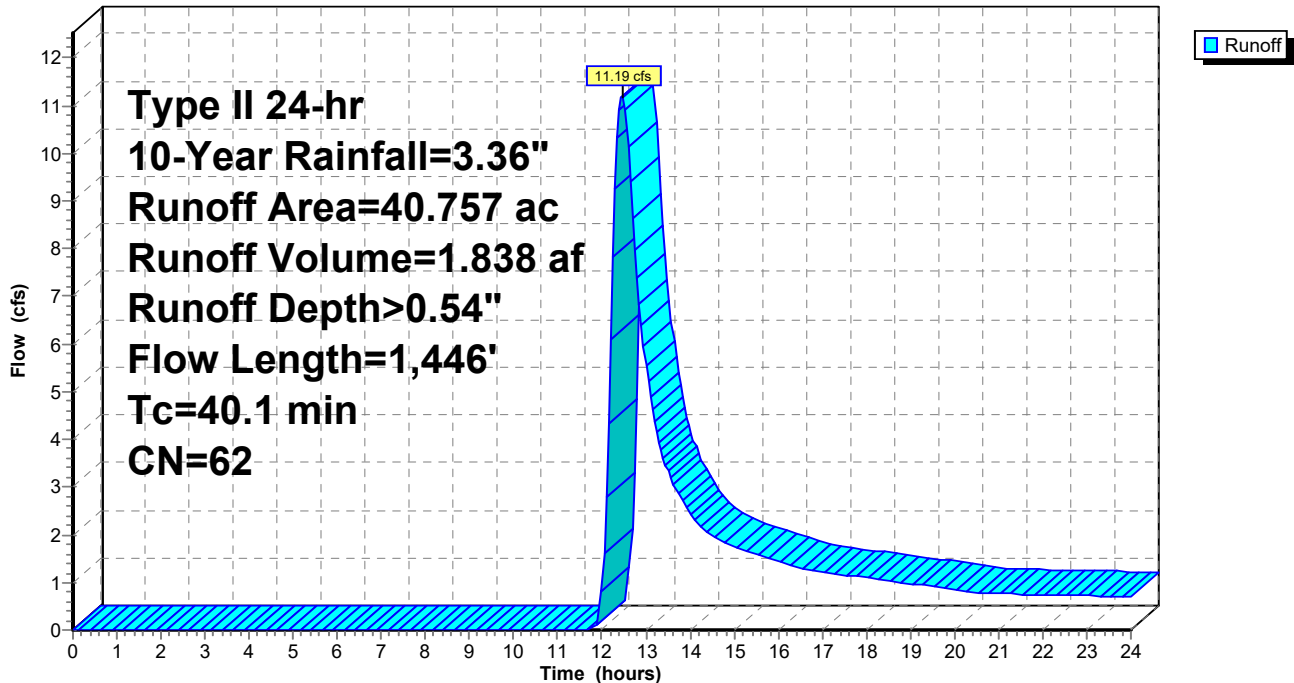
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-Year Rainfall=3.36"

Area (ac)	CN	Description
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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

**Subcatchment 2P: PR DA-2**

Hydrograph



**Proposed Conditions - Lansing Solar**

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

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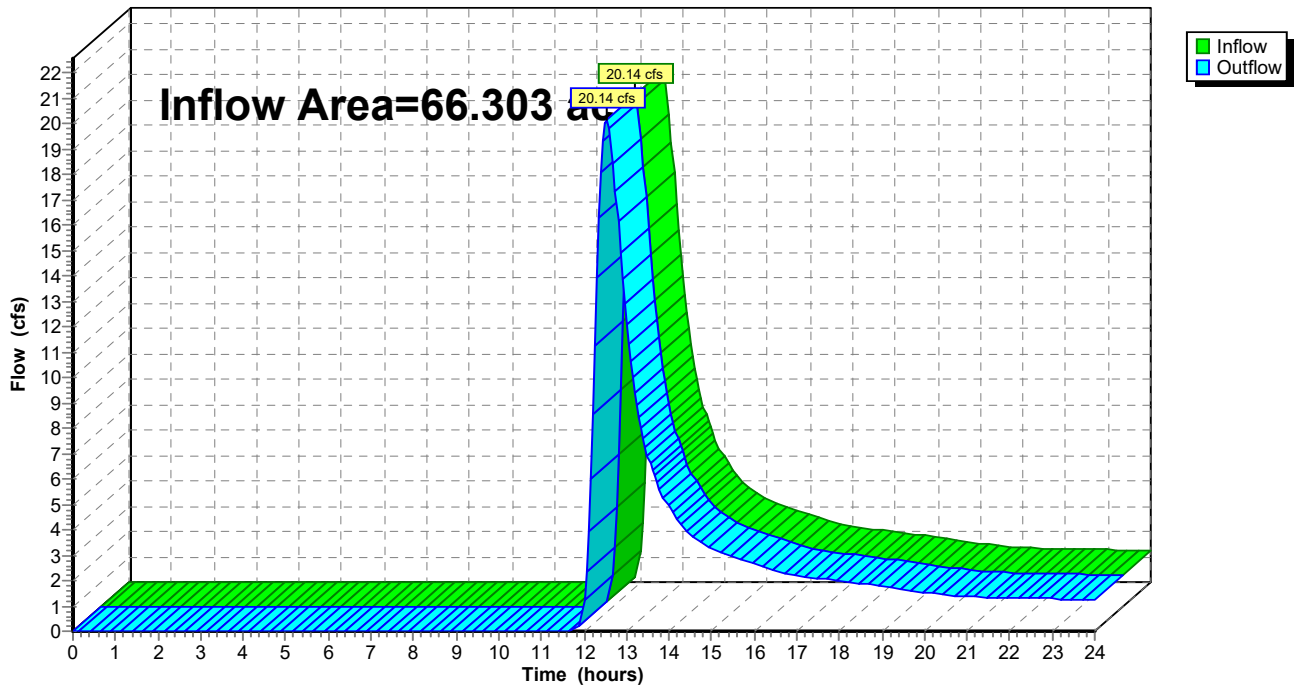
**Summary for Reach DL-1: DL-1**

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**

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

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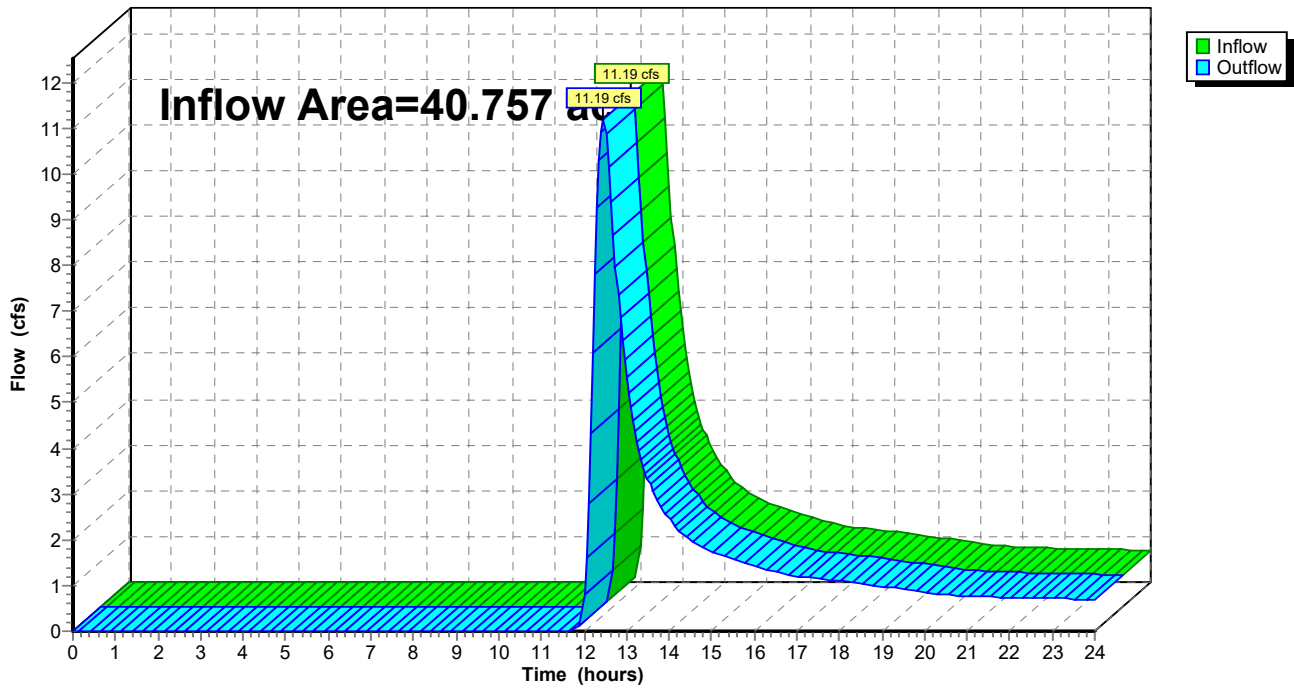
**Summary for Reach DL-2: DL-2**

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

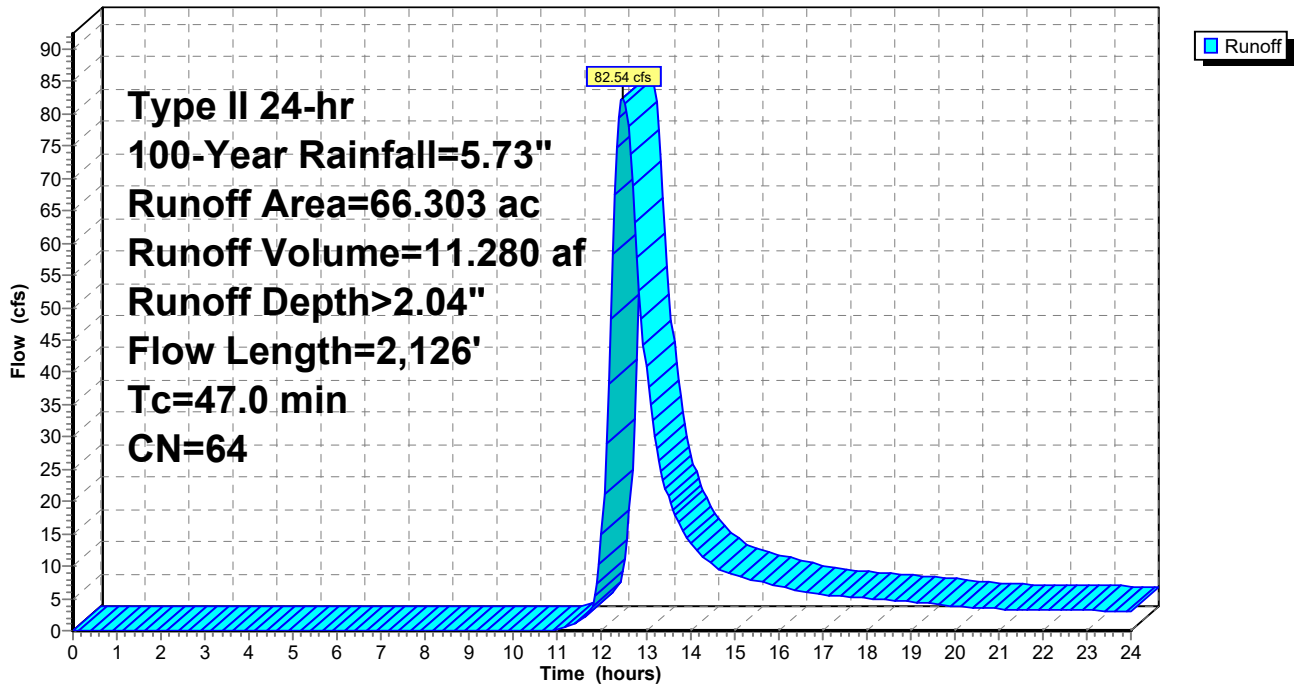
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-Year Rainfall=5.73"

Area (ac)	CN	Description
45.225	58	Meadow, non-grazed, HSG B
20.224	78	Meadow, non-grazed, HSG D
* 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		<b>Sheet Flow, 100-ft Sheet Flow</b>
					Grass: Short n= 0.150 P2= 2.32"
33.2	2,026	0.0211	1.02		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b>
					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

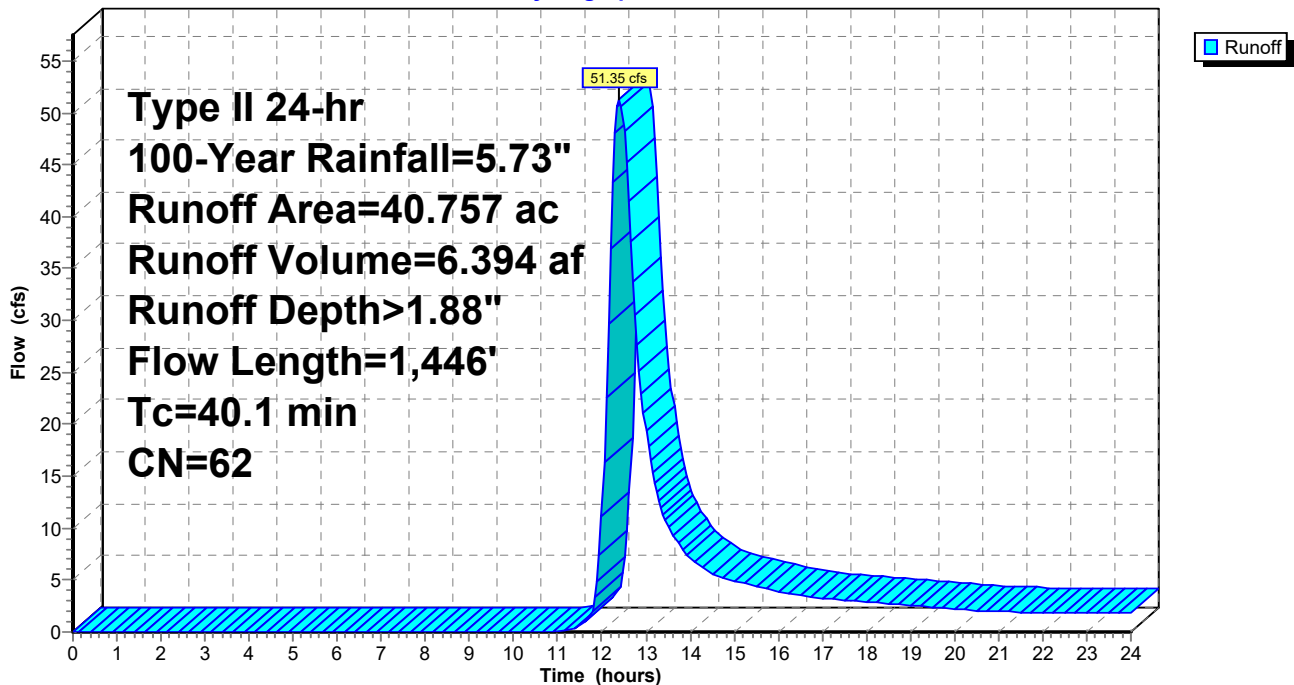
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-Year Rainfall=5.73"

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		<b>Sheet Flow, 100-ft Sheet Flow</b> Grass: Short n= 0.150 P2= 2.32"
21.7	1,346	0.0218	1.03		<b>Shallow Concentrated Flow, Shallow Concentrated Flow</b> Short Grass Pasture Kv= 7.0 fps
40.1	1,446	Total			

**Subcatchment 2P: PR DA-2**

Hydrograph



**Proposed Conditions - Lansing Solar**

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

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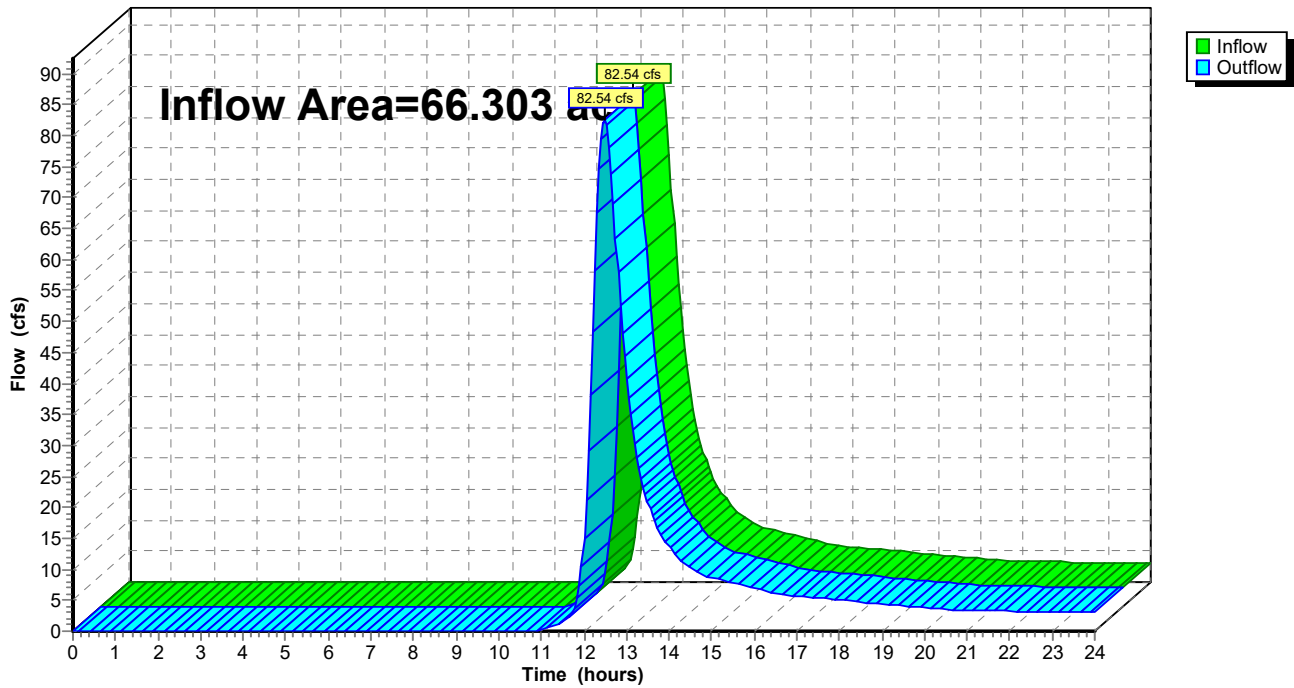
**Summary for Reach DL-1: DL-1**

Inflow Area = 66.303 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**

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

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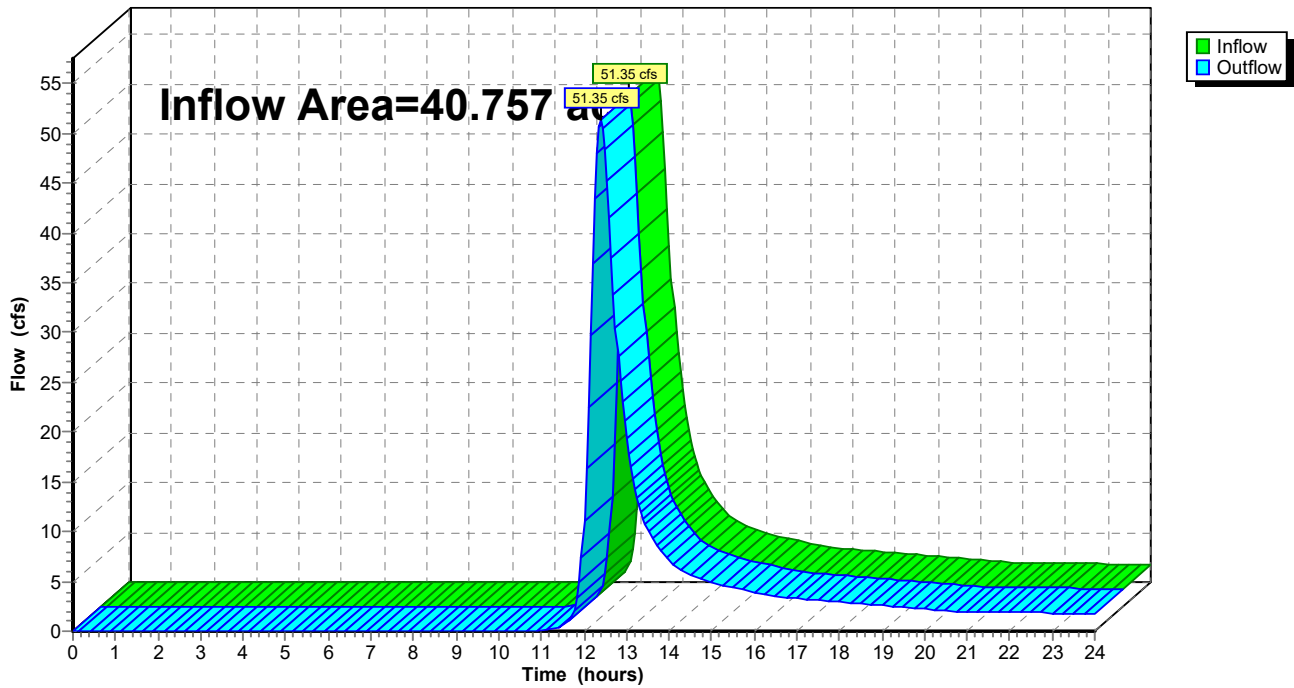
**Summary for Reach DL-2: DL-2**

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

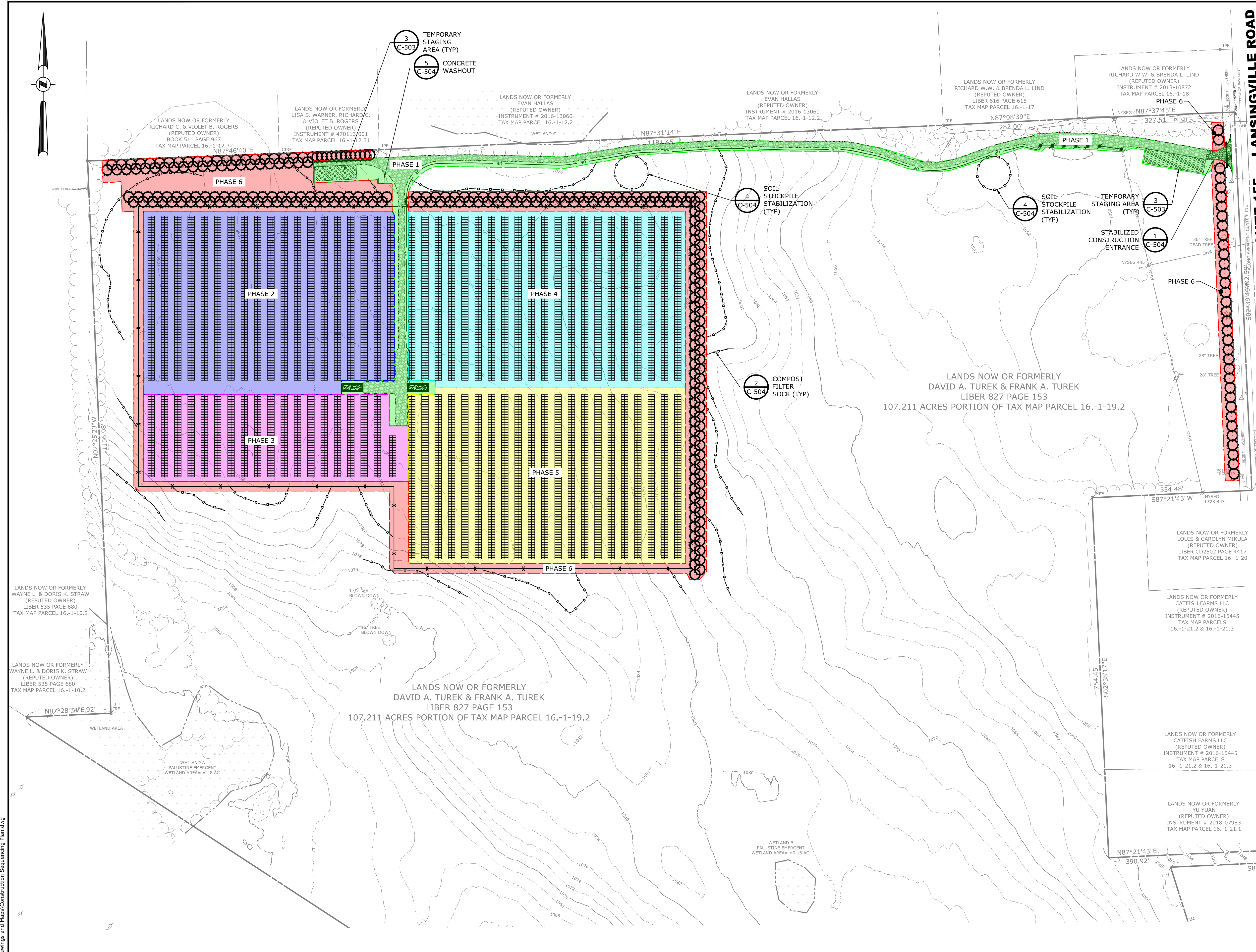
**Reach DL-2: DL-2**

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

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	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" = 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

**CSP**  
SHEET 01 OF 01  
DWG. NO: 22-064

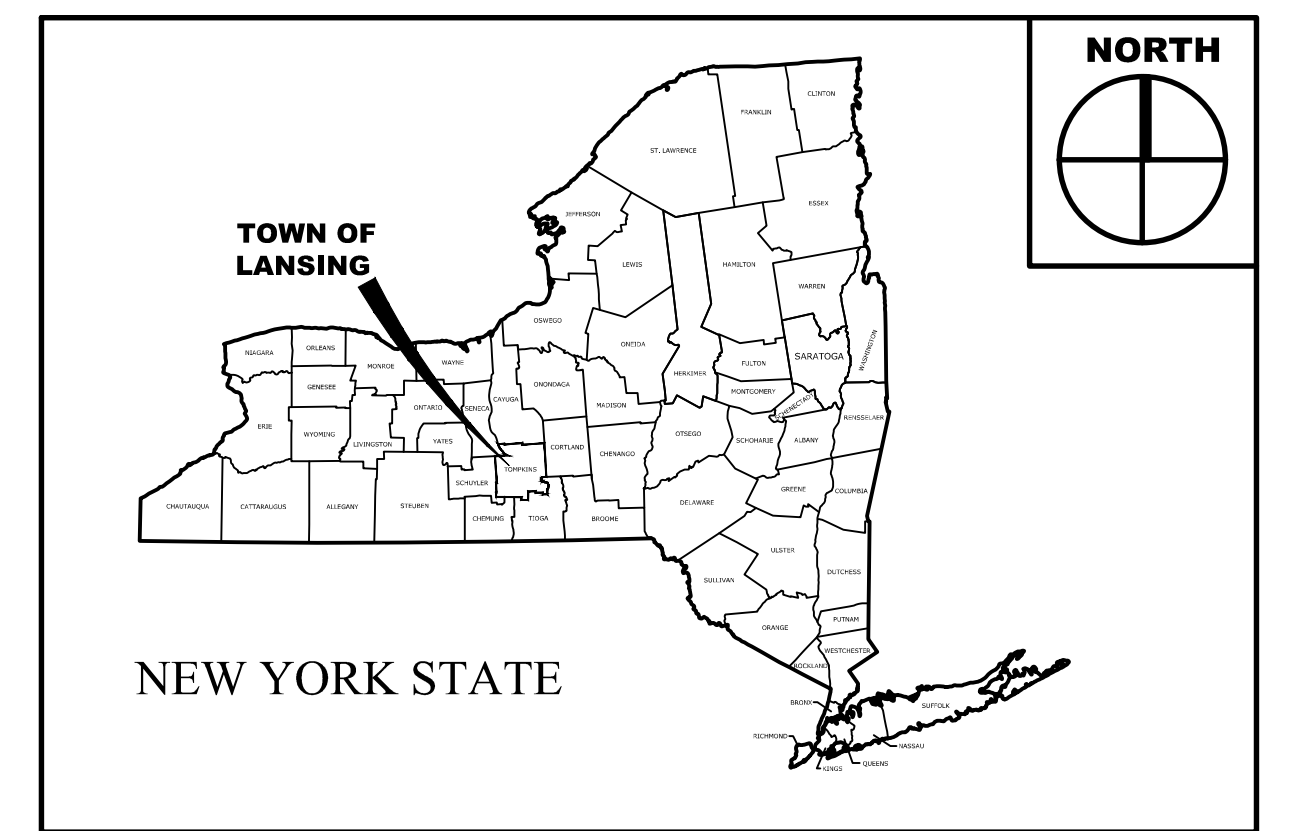


**APPENDIX G**  
Erosion and Sediment Control Plan and Details



# LANSING COMMUNITY SOLAR, LLC GENIE SOLAR ENERGY

LANSINGVILLE ROAD  
MARCH 24, 2023



**SITE LOCATION MAP**

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
C-501	SITE DETAILS	08
C-502	SITE DETAILS	09
C-503	SITE & EROSION AND SEDIMENT CONTROL DETAILS	10
C-504	EROSION AND SEDIMENT CONTROL DETAILS	11
C-701	TRAFFIC AND MAINTENANCE CONTROL DETAILS	12
C-702	TRAFFIC AND MAINTENANCE CONTROL DETAILS	13
C-703	TRAFFIC AND MAINTENANCE CONTROL DETAILS	14

### PROJECT SUMMARY

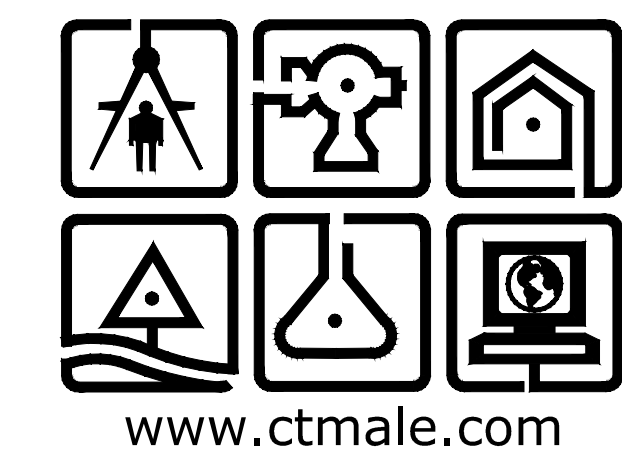
NAME PLATE RATING	6.252 MW DC / 5.0 MW AC
UTILITY TERRITORY	NYSEG
UTILITY ZONE	C
SUBSTATION	N. LANSING
CIRCUIT	4303101
DC/AC RATIO	1.25
ANNUAL PRODUCTION	8,420,030 MWh
PV MODULES	14,050 PRISM SOLAR PST-445W-M72H
INVERTERS	40 CHINT CPS SCH125KTL-DO/US-600
STRINGS PER INVERTER	25
MODULES PER STRING	14-15

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C.T. MALE ASSOCIATES  
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

## 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

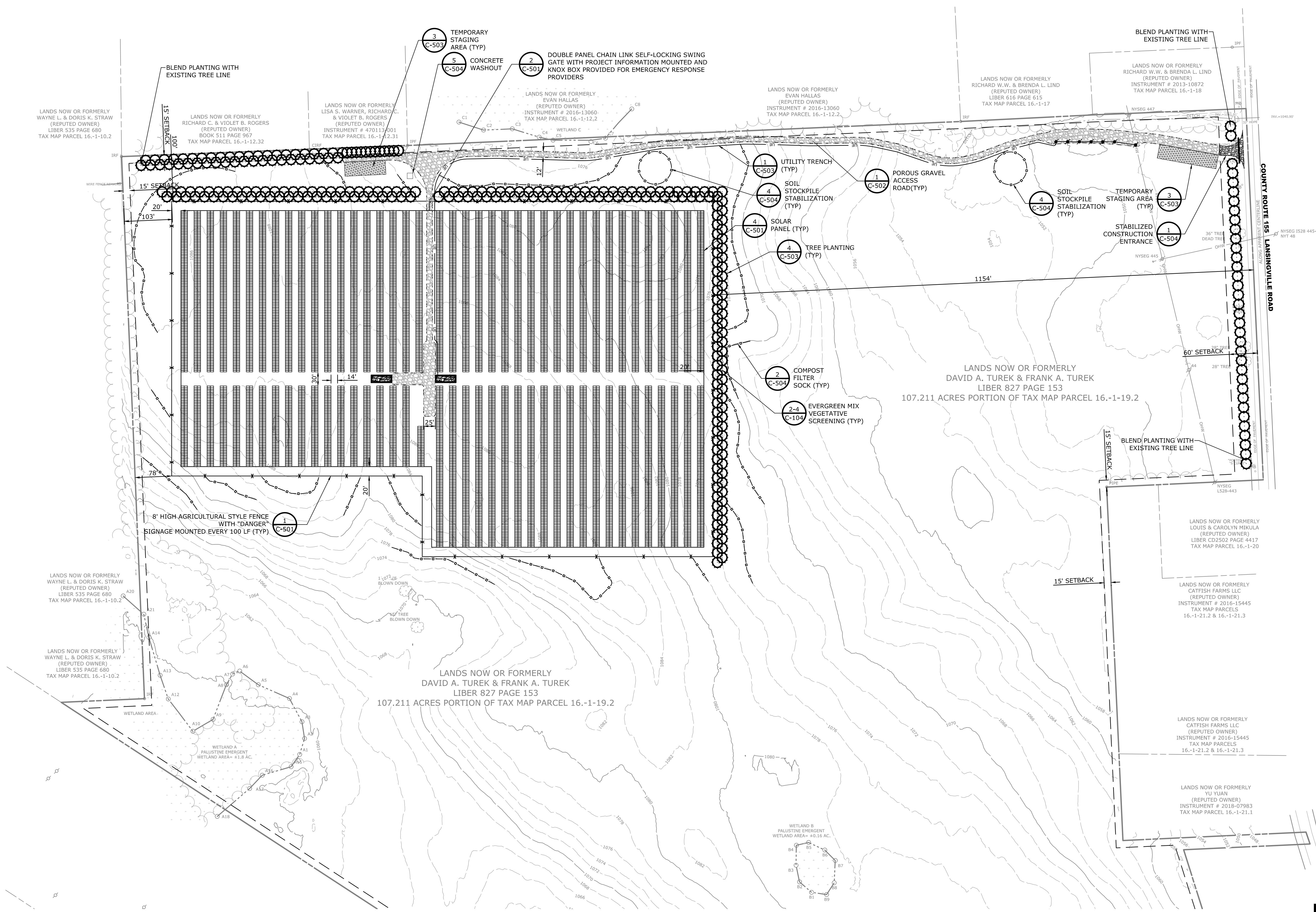
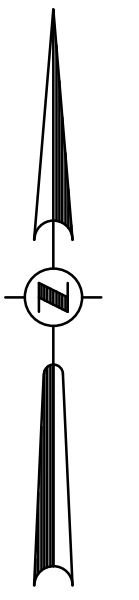


**PROJECT NO. 22.2303**  
**DRAWING NO. 23-0157**

**G-001**  
SHEET 01 OF 14

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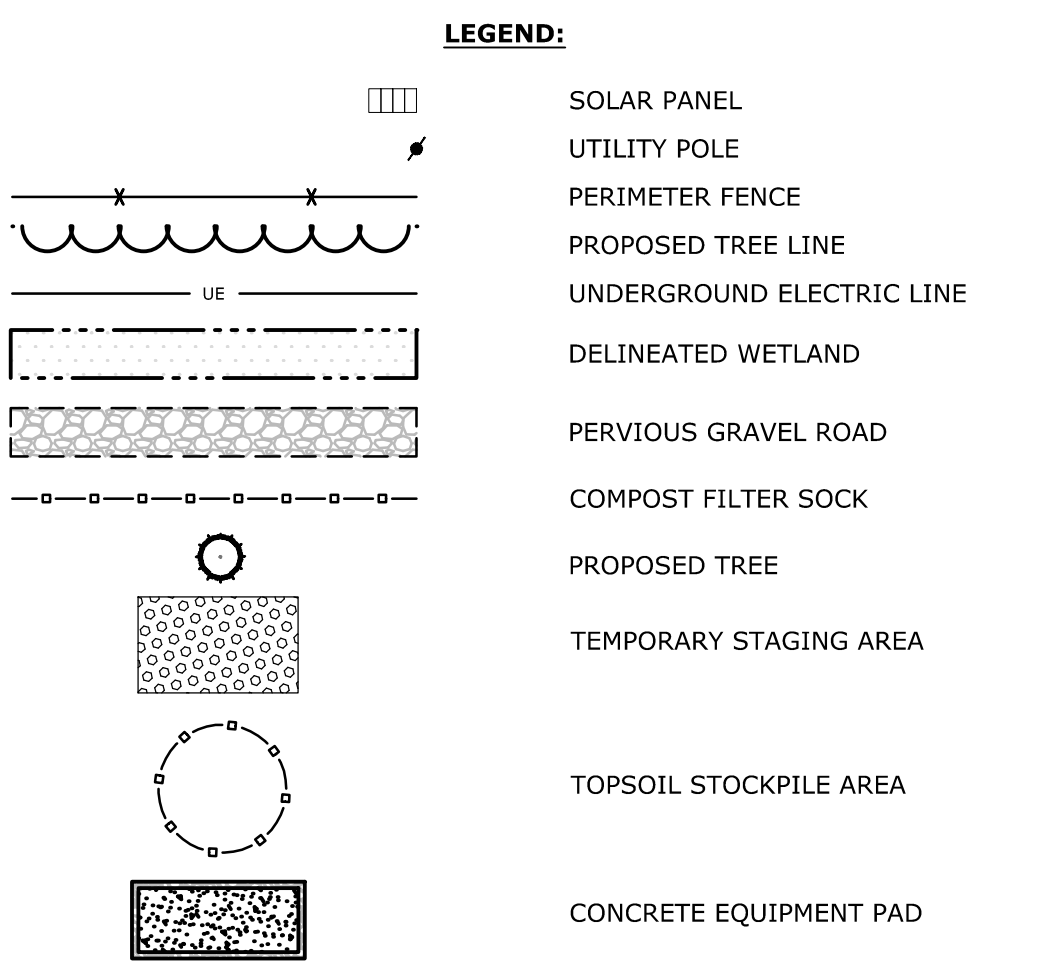


**SITE PLAN NOTES:**

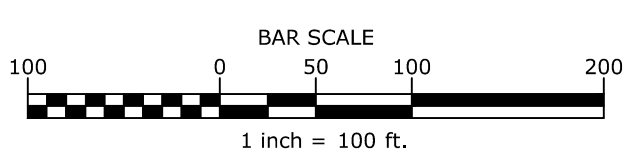
ZONING DISTRICT: (RA) RESIDENTIAL AGRICULTURE  
 TAX MAP I.D.: 16-1-19.2  
 TOTAL PARCEL SIZE: 107.2± AC  
 PROPOSED FENCE AREA: 18.0± AC (16.8% OF PARCEL)  
 PROPOSED ARRAY ENVELOPE: 16.3± AC (15.2% OF PARCEL)  
 PROPOSED LOT COVERAGE BY SOLAR PANELS: 7.7± AC (7.2% OF PARCEL)  
 PROPOSED AREA OF DISTURBANCE: 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.

**OWEN K. SPEULSTRA**  
P.E. NO. 104125

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

**OVERALL SITE AND ESC PLAN**

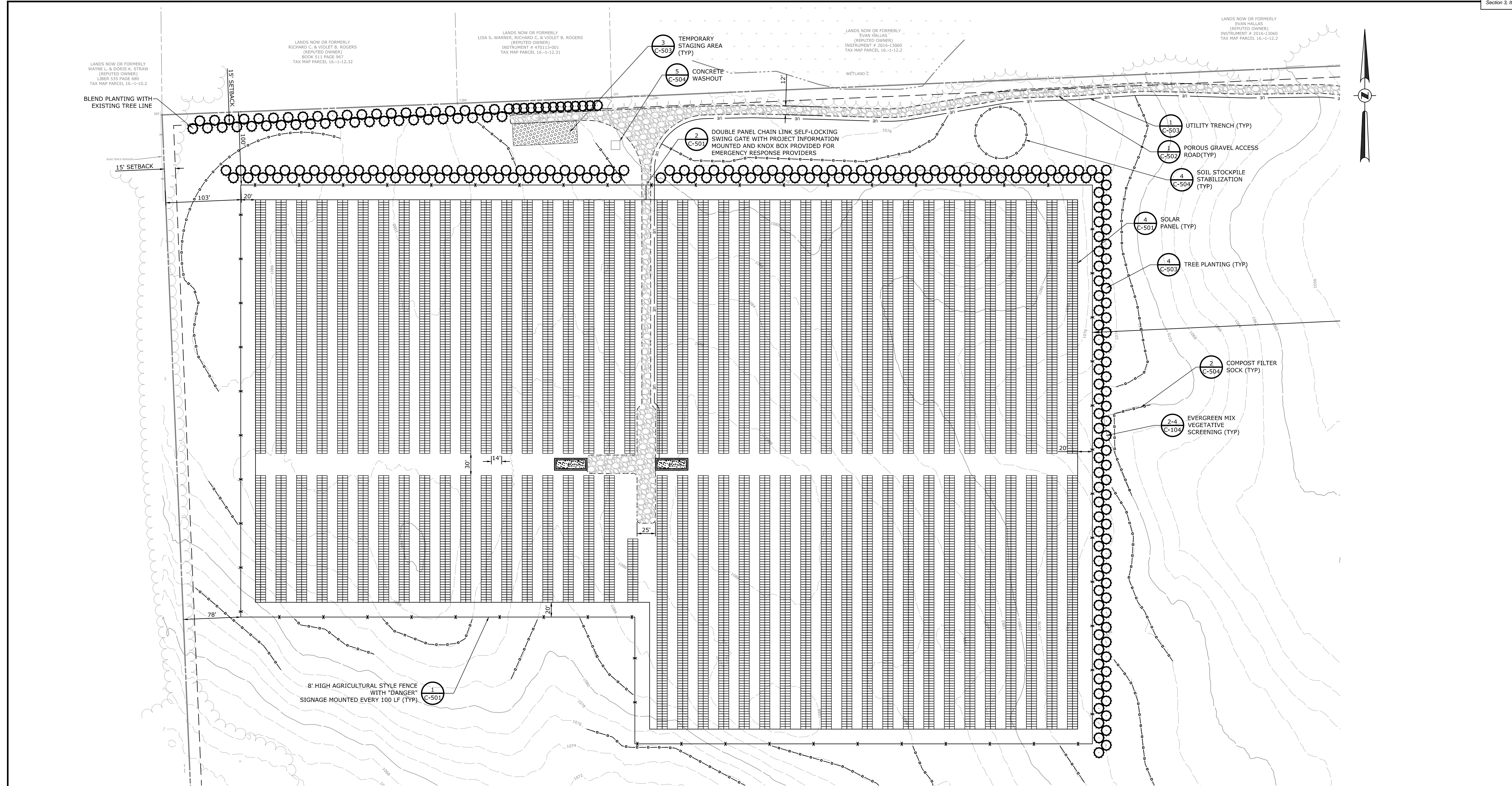
**LANSING COMMUNITY SOLAR, LLC**  
**GENIE SOLAR ENERGY**

TOWN OF LANSING TOMPKINS COUNTY, NEW YORK

**C.T. MALE ASSOCIATES**  
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.  
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**C-103**  
SHEET 04 OF 14  
DWG. NO: 23-015

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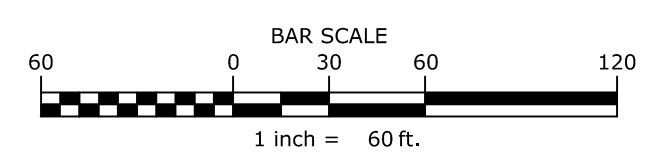
- SOLAR PANEL
- UTILITY POLE
- PERIMETER FENCE
- PROPOSED TREE LINE
- UNDERGROUND ELECTRIC LINE
- DELINEATED WETLAND
- PERVIOUS GRAVEL ROAD
- COMPOST FILTER SOCK
- PROPOSED TREE
- TEMPORARY STAGING AREA
- TOPSOIL STOCKPILE AREA
- CONCRETE EQUIPMENT PAD

**SITE PLAN NOTES:**

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**

**SOLAR ARRAY & ESC PLAN**

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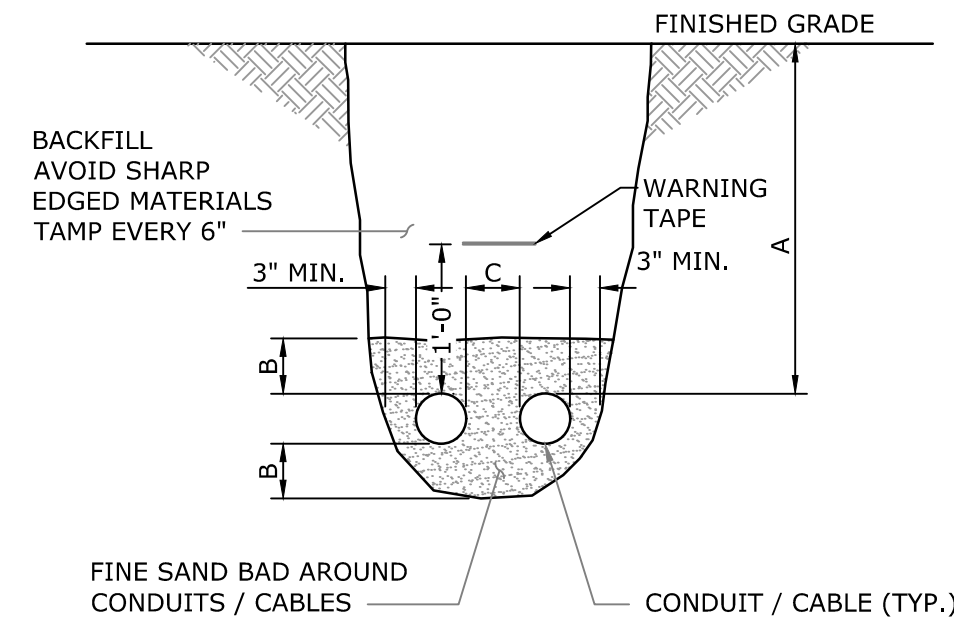
**C-105**  
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 SCALE : AS NOTED  
 DATE : MARCH 24, 2023

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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"

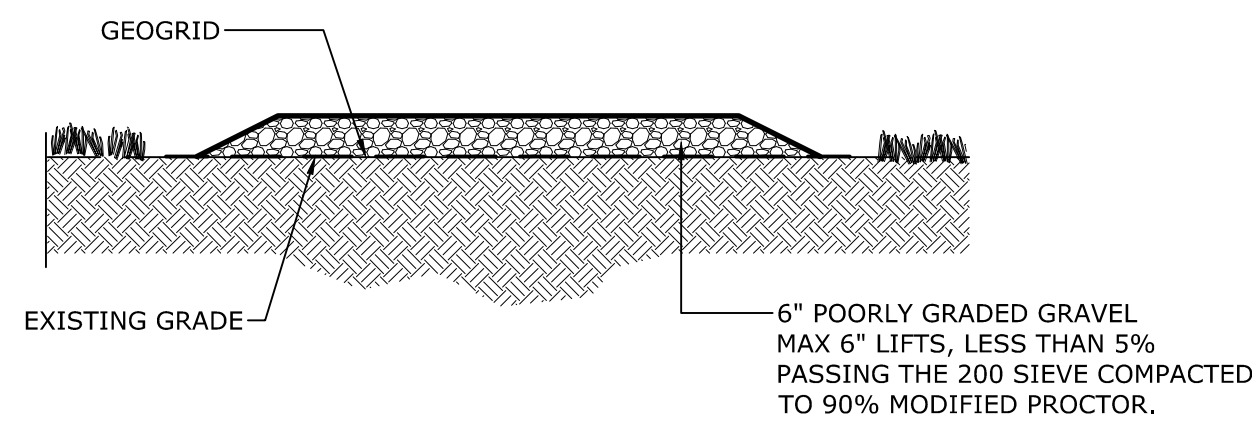
**NOTES:**

- 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 - ERNMX#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		

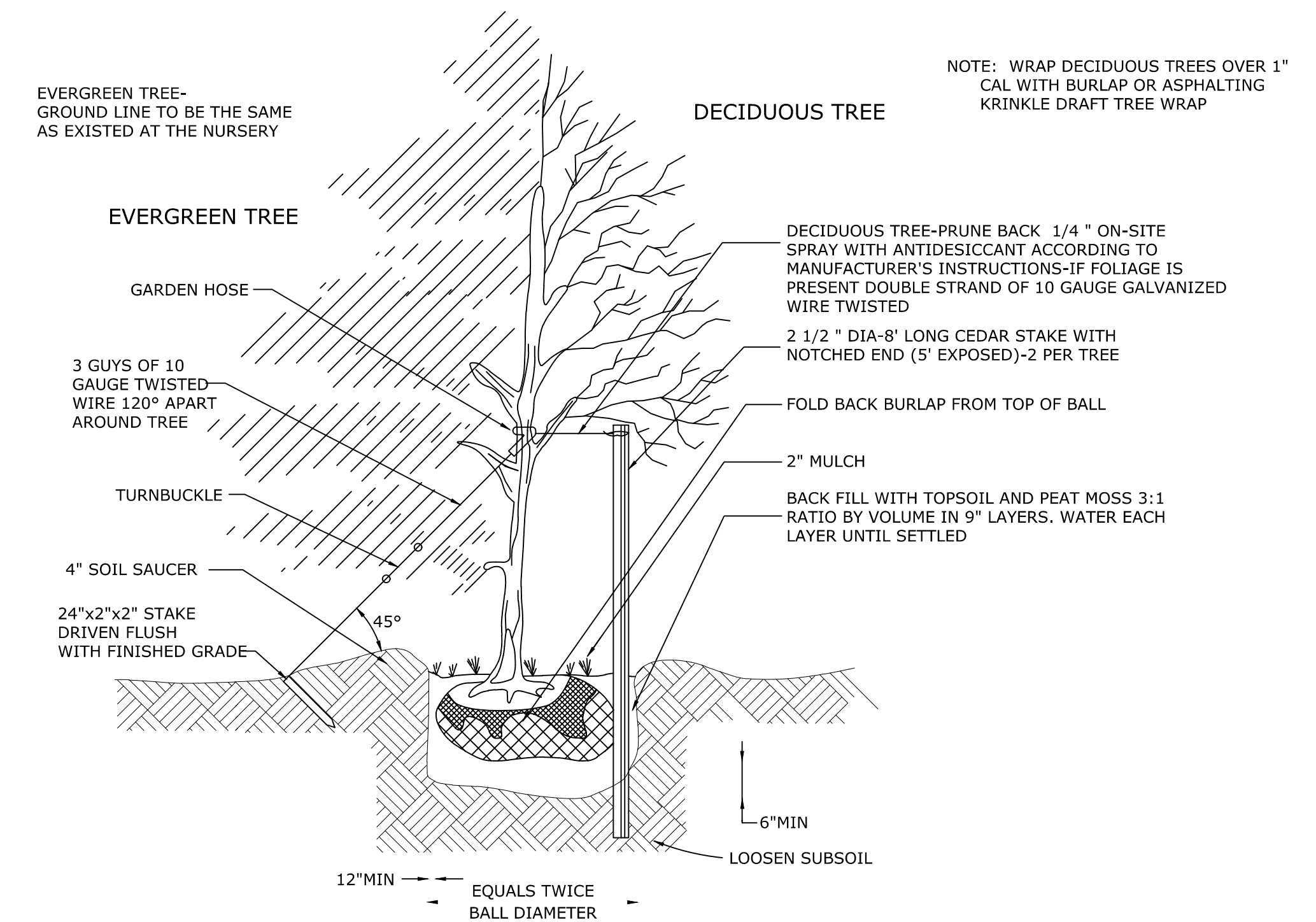
**2 SEED MIXTURES DETAIL**  
C-503 SCALE: NTS CROSS REFERENCE: NONE



**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



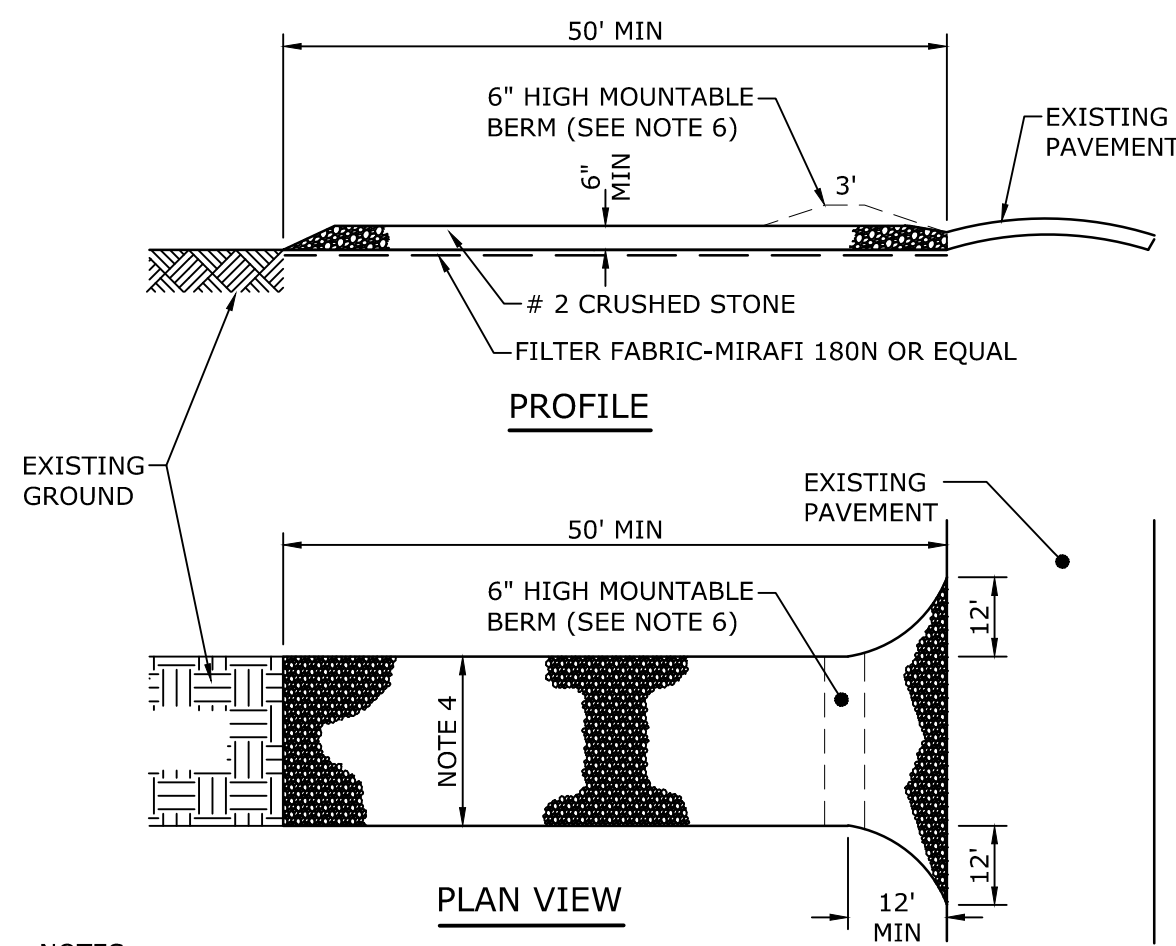
**4 TYPICAL PLANTING DETAIL**  
C-503 SCALE: NONE CROSS REFERENCE: NONE

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**PRELIMINARY**

OWEN K. SPEULSTRA P.E. NO. 104125	DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.  © 2023 C.T. MALE ASSOCIATES DESIGNER: MLS DRAFTED : MLS CHECKED : OKS PROJ. NO : 22.2303 SCALE : AS NOTED DATE : MARCH 24, 2023	<b>SITE &amp; ERSOSION AND SEDIMENT CONTROL DETAILS</b>  <b>LANSING COMMUNITY SOLAR, LLC</b> <b>GENIE SOLAR ENERGY</b>  TOWN OF LANSING TOMPKINS COUNTY, NEW YORK
SHEET 10 OF 14 DWG. NO: 23-015							<b>C-503</b> SHEET 10 OF 14 DWG. NO: 23-015





- 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.

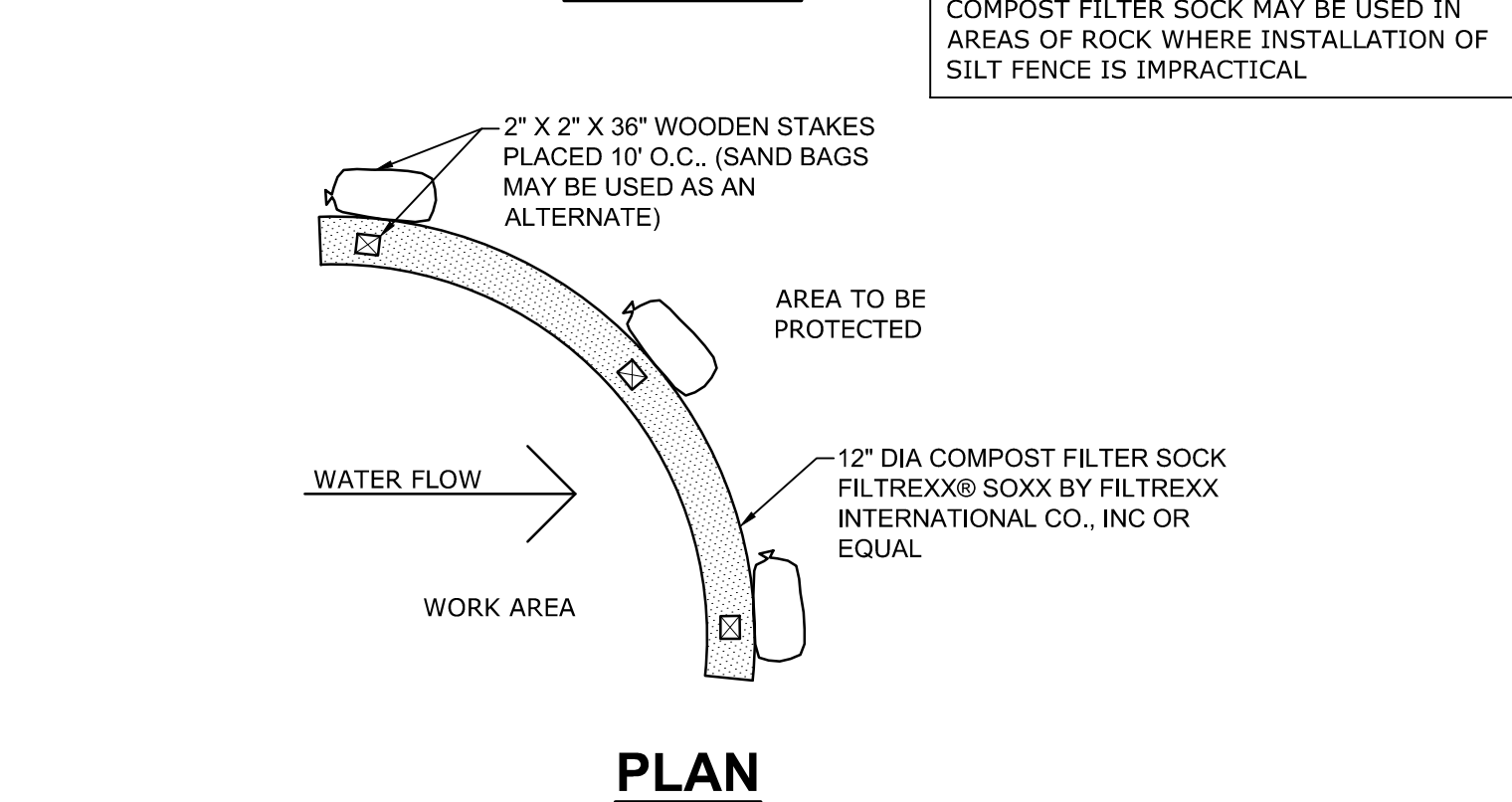
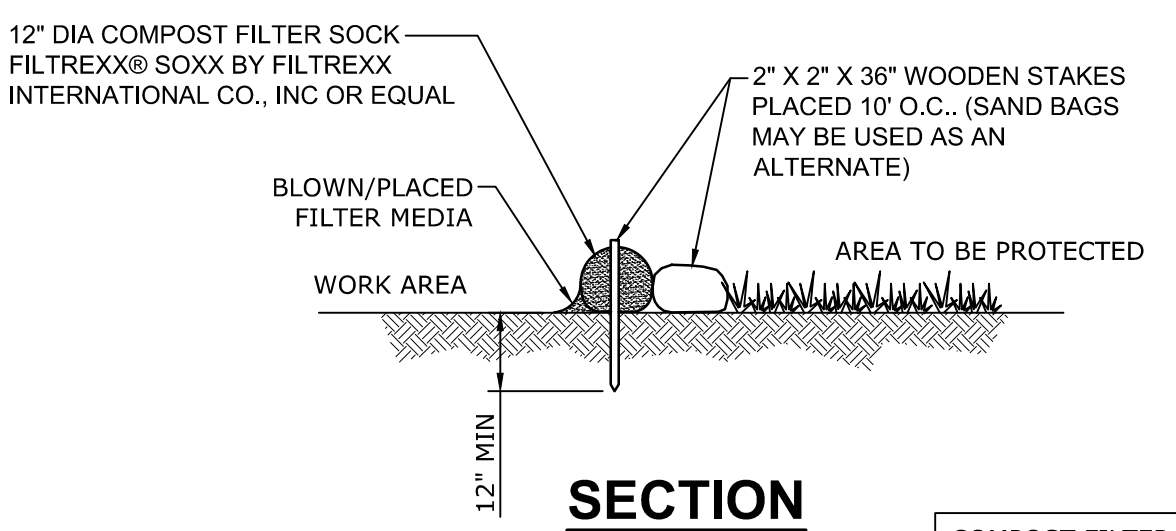
**1 STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
SCALE: NONE  
CROSS REFERENCE: NONE

**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.



- 2 COMPOST FILTER SOCK**  
SCALE: NTS  
CROSS REFERENCE: NONE
- 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

**SILT FENCE/COMPOST FILTER SOCK (CFS) NOTES:**

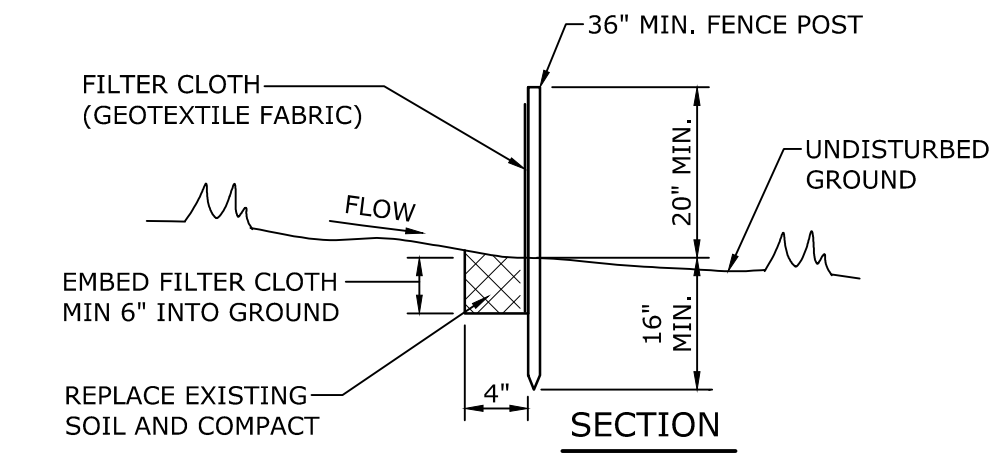
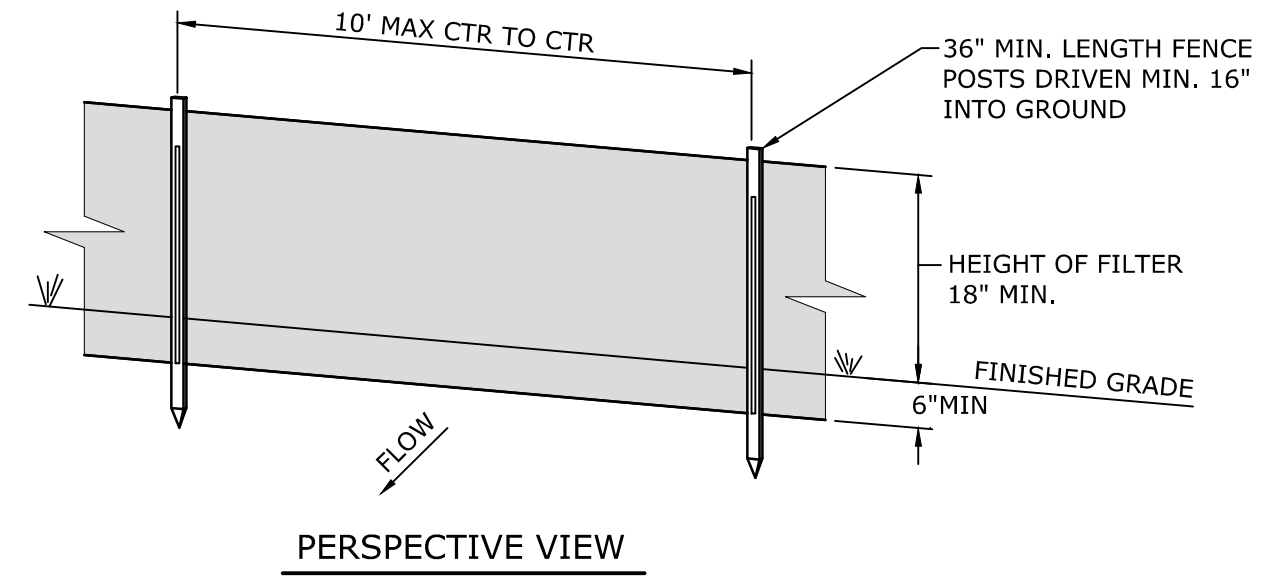
- SILT FENCE OR CFS SHALL BE PLACED ON THE DOWNSLOPE SIDE OF DISTURBED AREAS AND AROUND THE PERIMETER OF SOIL STOCKPILES.
- COMPOST FILTER SOCK SHALL BE PLACED AROUND THE BOUNDARY OF WETLANDS ADJACENT TO THE WORK AREA, AND AT THE EDGE OF WETLANDS AFTER CONSTRUCTION IS COMPLETED.
- SILT FENCE SHALL BE 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.

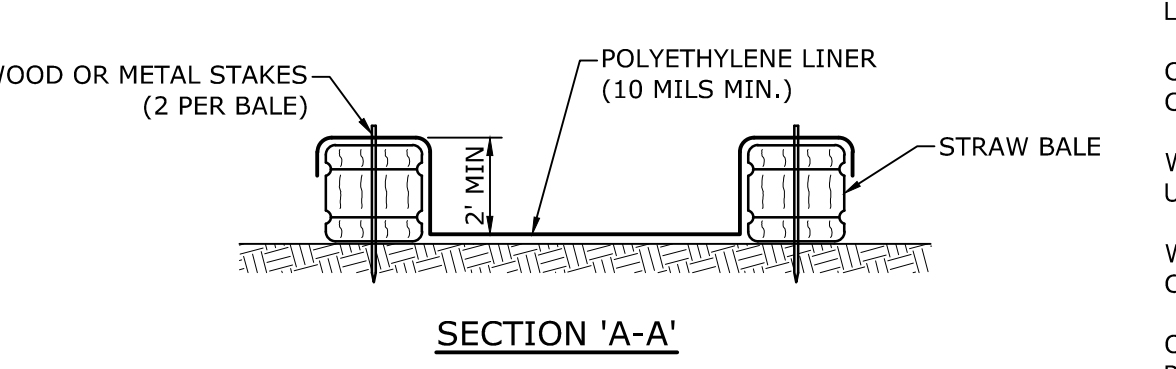
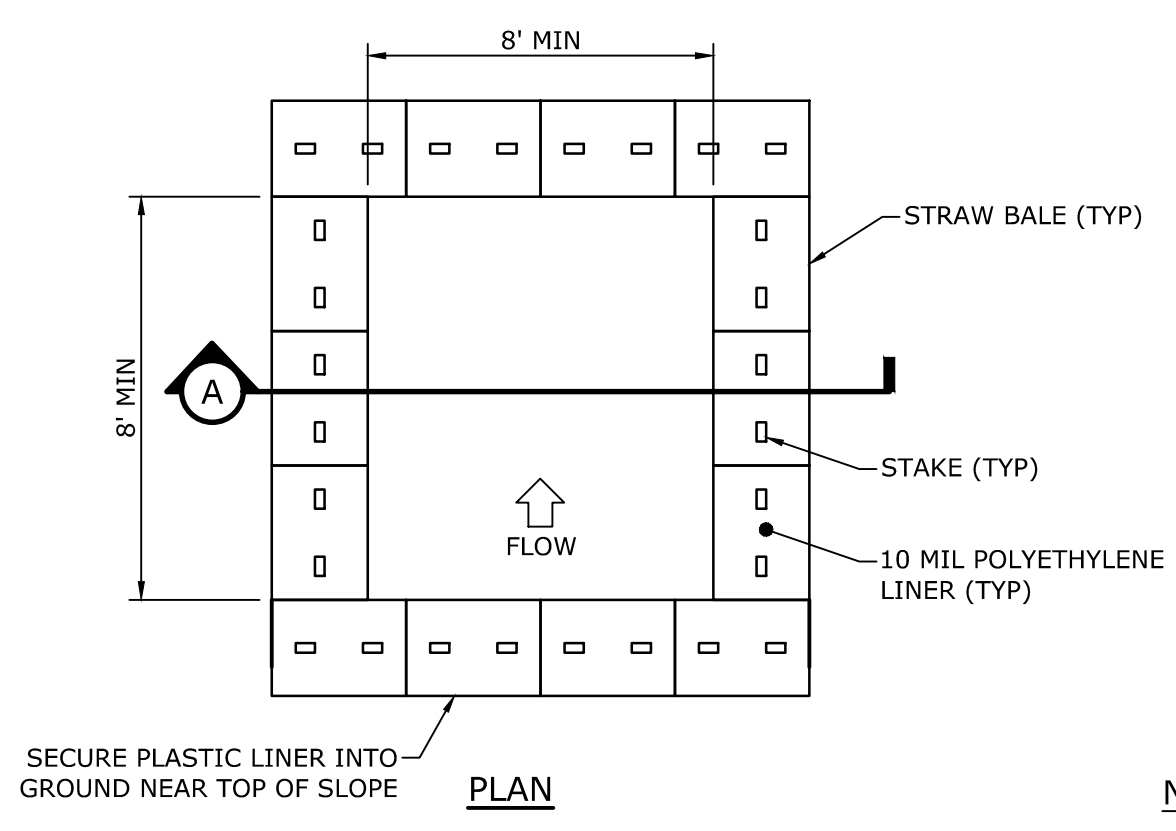
**STABILIZED CONSTRUCTION ACCESS NOTES:**

- 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.

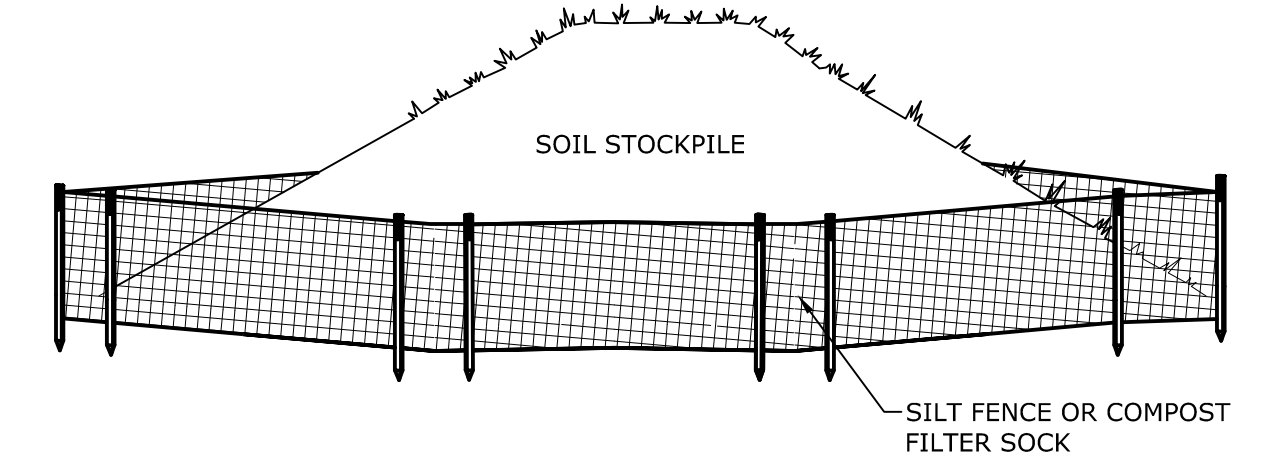


- NOTES:**
- POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
  - FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
  - FILTER CLOTH SHALL BE MIRAFI 100X OR APPROVED EQUAL.
  - MAINTENANCE 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 STANDARD SILT FENCE**  
SCALE: NONE  
CROSS REFERENCE: NONE



**5 CONCRETE WASHOUT DETAIL**  
SCALE: NONE  
CROSS REFERENCE: NONE



- TOPSOIL AND FILL THAT IS ANTICIPATED TO REMAIN STOCKPILED ON-SITE FOR PERIODS GREATER THAN 30 DAYS SHALL BE STABILIZED USING VEGETATION, GEOTEXTILE OR PLASTIC COVERS. THIS CAN BE AIDED BY ORIENTING THE STOCKPILE LENGTHWISE INTO PREVAILING WINDS. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FT OF ANY DITCH, STREAM, OR OTHER SURFACE WATERBODY.
- SOIL STOCKPILES MUST BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED STRAW MULCH, ROLLED STABILIZATION MATTING, OR OTHER DURABLE COVERING. AN APPROVED BARRIER (I.E., SILT FENCE, COMPOST FILTER SOCKS, ETC.) MUST BE INSTALLED AT LEAST 15 FEET FROM THE TOE OF THE STOCKPILE TO PREVENT SOIL MIGRATION AND TO CAPTURE LOOSE SOIL.
- SILT FENCE SHALL BE INSTALLED AROUND ALL STOCKPILES OF FILL, TOPSOIL AND EXCAVATED OVERBURDEN THAT ARE TO REMAIN EXPOSED FOR PERIODS LESS THAN 30 DAYS. SILT FENCE SHALL BE ANCHORED AND MAINTAINED IN GOOD CONDITION UNTIL SUCH TIME AS SAID STOCKPILES ARE REMOVED AND STOCKPILING AREAS ARE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED. COMPOST FILTER SOCK MAY BE SUBSTITUTED FOR SILT FENCE.
- 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.

**4 SOIL STOCKPILE STABILIZATION**  
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

**PRELIMINARY**

**EROSION AND SEDIMENT CONTROL DETAILS**

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