

NORTH TRIPHAMMER ROAD  
LANSING, TOMPKINS COUNTY, NEW YORK 14850  
TAX ID(S) 44-1-1.2, 28, 3.3

## WETLAND MITIGATION PLAN

**PREPARED FOR:**

Delaware River Solar  
140 East 45th Street (Suite 32B-1)  
New York, New York 10017

**PREPARED BY:**



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630 Johnson Avenue, Suite 7  
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PWGC Project Number: DRS2404

NOVEMBER 2024



**WETLAND MITIGATION PLAN  
NORTH TRIPHAMMER ROAD, LANSING, NEW YORK 14850**

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FIGURE 2           Solar Project #2 Layout Technical Review





## 1.0 INTRODUCTION

Delaware River Solar (Client) retained P.W. Grosser Consulting, Inc. (PWGC) to prepare a Wetland Mitigation Plan (WMP) for the two proposed solar project areas (hereafter referred to as the “Site”) located on North Triphammer Road, Lansing, New York, identified as the tax parcels 44.-1-3.3 and 44.-1-1.2 on the Tompkins County Tax Map. The two proposed solar project areas are 14.02 acres and 19.55 acres, respectively.

In March 2024, the Client retained PWGC to complete a Wetland Assessment at the Site and to prepare a Wetland Assessment Letter Report. The assessment concluded that multiple potential wetlands and / or waterbodies were identified, and that a portion of the identified potential wetlands appeared to be contiguous with a large offsite wetland complex identified in the National Wetland Inventory (NWI). There were no identified mapped New York State Department of Environmental Conservation (NYSDEC) Article 24 Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site. There were also no identified NYSDEC Article 15 Protected Waters on the Site.

A Wetland Delineation was performed on the Site on June 12, 13, and 14, 2024. Wetlands were identified within each of the two proposed solar project areas. Waterbodies were also identified in the form of drainageways within the two hedgerows that separated the three onsite fields, with each of these waterbodies bounded by wetlands. These wetland and water bodies were deemed to potentially be jurisdictional Waters of the United States (WOTUS) wetlands and / or water bodies. Potentially jurisdictional WOTUS consisted of the two sets of drainageways (streams) located within the hedgerows which bisect the center of the site from north to south including the adjacent freshwater wetlands, and one additional larger area of freshwater wetland in the southeast.

On October 23, 2024, PWGC met with a United States Army Corps of Engineers (USACE) Buffalo New York District Engineer at the Site to perform an investigation pursuant to obtaining a jurisdictional determination (JD) for the wetlands delineated by PWGC in June 2024. The USACE was in general agreement with delineated boundaries of wetlands on the Site. Preliminary results of the JD investigation suggested that the Site likely contains WOTUS regulated by the USACE. Following the Site inspection, JD Field Inspection Notes were drafted jointly by PWGC and the USACE District Engineer to determine next steps pursuant to obtaining a determination. The USACE District Engineer suggested that the most efficient path would be to assume that all the wetlands delineated on the Site were WOTUS and to seek a permit verification that the permanent discharge resulting from the proposed project would fall under Nationwide Permit 14 for Linear Transportation Projects.





## 2.0 PURPOSE

The purpose of this WMP is to develop a mitigation plan for the unavoidable loss of WOTUS to be submitted to the (USACE) Buffalo District Engineer. This WMP will be submitted as part of the pre-construction notification (PCN) pursuant to determining if the Nationwide Permit 14 for Linear Transportation Projects is suitable for the portion of the proposed work at the site covered under Section 404 of the Clean Water Act. If Nationwide Permit 14 is deemed practicable by the District Engineer, the applicant will seek mitigation bank or in-lieu fee program credits as the proposed option for compensatory mitigation.

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### **3.0 SUMMARY OF IMPACTS**

The proposed project, consisting of two proposed arrays, will permanently impact 0.27 acres and temporarily impact 8.05 acres of WOTUS on the Site. There are no identified proposed impacts to mapped, currently regulated NYSDEC freshwater wetlands. Proposed site layout plans are included as **Figure 1** and **Figure 2** (MRS Layout Technical Review Plans).

PWGC completed a functional assessment of the delineated wetlands to identify key wetland functions and values that are important to mitigate against loss from the proposed project. Identified functions and values provided by wetlands to potentially be impacted include groundwater recharge/discharge, sediment/toxicant/pathogen retention, sediment stabilization, and wildlife habitat.

The proposed solar project will result in permanent loss to some WOTUS, temporary impacts to additional WOTUS, and permanent forest conversion. PWGC will consult with the USACE Buffalo District Engineer to determine the appropriate mitigation ratios for the anticipated impacts to WOTUS.

#### **3.1 PERMANENT IMPACTS**

Unavoidable discharges for the installation of the proposed gravel access roads for the two proposed solar project array areas will permanently impact 0.27 acres of WOTUS. Proposed gravel roadways for array #1 will permanently impact 0.01 acres of WOTUS and proposed gravel roadways for array #2 will permanently impact 0.26 acres of WOTUS. Permanent impacts are all anticipated within shrub/forest wetland habitat.

#### **3.2 PERMANENT FOREST CONVERSION**

Vegetative cutting within the two proposed solar projects' limit of disturbance (LOD) will permanently convert forest/shrub wetland habitat. Forested wetland vegetation will be cut to install and safely operate the proposed solar arrays and aboveground utility lines. These forested wetlands will become dominated by herbaceous and shrub/sapling cover types. The cutting of trees in forested areas within the two proposed solar array project areas may affect wildlife species composition by favoring species that prefer shrub/sapling, emergent, and/or open habitats as opposed to those that inhabit forested communities. Total tree cutting will result in the conversion of 8.32 acres of forested USACE jurisdictional wetlands.

#### **3.3 TEMPORARY IMPACTS**

Temporary impacts include the placement of timber matting where necessary for the construction access roads and the installation of solar arrays, aboveground utility lines, and fences. Temporary impacts on freshwater wetlands are anticipated to occur during construction activities and will be restored upon completion of construction utilizing best management practices BMPs as directed by the USACE. Temporary impacts to freshwater wetland habitats are anticipated to affect shrub / forested habitat.

#### **3.4 IMPACTS TO NYSDEC FRESHWATER WETLANDS**

There are no currently mapped Article 24 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site.

#### **3.5 IMPACTS TO FEDERAL FRESHWATER WETLANDS AND WATERBODIES**

The proposed project, consisting of two proposed arrays, will permanently impact 0.27 acres and temporarily impact 8.05 acres of WOTUS on the Site. The full 8.32 acres of WOTUS covered by the





permanent and temporary impacts will also undergo forest conversion. The following table includes anticipated impacts to freshwater wetlands.

Table 1. Anticipated Impacts to USACE Freshwater Wetlands and NYSDEC Wetlands.

Impact Type	USACE Wetlands (acres)	Mapped NYSDEC Wetlands (acres)
<b>Permanent Impacts to WOTUS (fill / excavation for roadways)</b>	0.27	0
<b>Temporary Impacts to WOTUS (timber matting, vegetation cutting, fence and solar array installation)</b>	8.05	0
<b>Permanent forest conversion</b>	8.32 (includes the sum of the other two rows)	0





#### **4.0 MITIGATION REQUIREMENT**

As discussed above, the Project's mitigation requirement will be established through consultation with the USACE Buffalo District Engineer. As permanent filling and/or excavation in USACE jurisdictional wetlands are greater than 0.10 acres, mitigation is expected to be required for these permanent impacts. The compensatory mitigation requirement for the two proposed solar project arrays is expected to address the anticipated permanent impacts to USACE wetlands (0.27 acres). PWGC will verify with the district engineer if any additional compensatory mitigation is required for the USACE wetlands.

##### **4.1 NYSDEC MITIGATION REQUIREMENT**

There are no currently mapped Article 24 New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands or 500-foot Freshwater Wetland check zones on the Site. At the time of this report, there are no anticipated compensatory mitigation requirements on the state level for the anticipated permanent and temporary impacts to wetlands affiliated with the proposed installation of the two solar arrays.

#### **5.0 PROPOSED MITIGATION PLAN**

PWGC proposes purchasing credits from an in-lieu fee wetland mitigation program. The amount of credits to be purchased will be determined after consultation with the USACE Buffalo District Engineer. PWGC will propose the anticipated permanent impact acreage for the two proposed solar arrays (0.27 acres) as a compensatory mitigation requirement. However, mitigation ratios for wetland impacts will be agreed upon between PWGC and USACE. Once the amount of credits required has been agreed upon, an in-lieu fee wetland mitigation program will be identified that has enough credits available. If there are no credits available from an in-lieu fee wetland mitigation program, then PWGC will work with the USACE to identify an alternative method of mitigation.

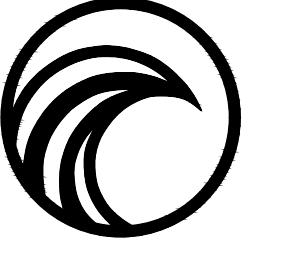




## FIGURES

DRAFT





**PWGC**  
CLIENT DRIVEN SOLUTIONS  
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Bohemian, NY 11716-2618  
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E-mail: INFO@PWGROSSER.COM

#### CONSULTANTS

##### SYSTEM SUMMARY

MODULE:  
MANUFACTURER: HANWA  
MODEL: Q.PEAK DUO XL-G11.3 / BFG  
MODULE OUTPUT POWER: 585 WP  
STRING SIZE: 24  
NUMBER OF STRINGS: 420  
MODULE QUANTITY: 10,080  
PV SYSTEM OUTPUT: 5,896.80 KWP DC

COMBINER BOX:  
CB QTY/INPUTS (QTY/INP): 30 CBs (6 INPUTS)  
6 CBs (5 INPUTS)

INVERTER:  
MANUFACTURER: SUNGROW  
MODEL: SG3150 UD-MV  
QUANTITY/RATING: 2 / 2,500 KW (LIMITED)  
PV SYSTEM OUTPUT: 5,000 KW AC  
DC SYSTEM VOLTAGE: 1,500 V

MV INTERCONNECTION:  
TRANSFORMER QTY/RATING: 2 / 3,150 KW  
INTERCON. VOLTAGE: 34.5 KV  
RACKING:

MANUFACTURER: TBD  
CONFIGURATION: SAT - 1 MODULE PORTRAIT  
TILT: ±5°  
AZIMUTH: 178°

7	
6	
5	UPDATED WETLANDS
4	CLIENT REVIEW
3	CLIENT REVIEW
2	UPDATED WETLANDS
1	CLIENT REVIEW
	Number Revision Description Revision Date

Designed By \_\_\_\_\_ Date Submitted \_\_\_\_\_  
Drawn By \_\_\_\_\_ Date Created 04/04/24  
Approved By \_\_\_\_\_ Scale 1" = 150'

Client: NY LANSING I, LLC  
P.O. BOX 384  
CALICOON, NY 12783

#### NORTH TRIPHAMMER ROAD SOLAR FARM CONCEPTUAL SITE PLAN

Project Address: NORTH TRIPHAMMER ROAD  
TOWN OF LANSING  
TOMPKINS COUNTY, NEW YORK  
County Tax Map Number: 44-1-1.2 & 44-1-3.3  
Regulatory Reference Number: \_\_\_\_\_  
Title of Drawing: \_\_\_\_\_

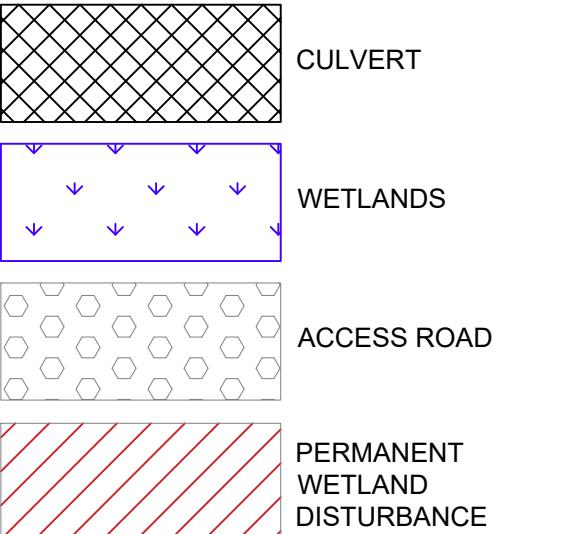
#### PROPOSED WETLANDS DISTURBANCE PLAN

Drawing Number: C-503  
Sheet 10 of 13  
DRS2404  
PWGC Project Number: \_\_\_\_\_  
Drawing Date: \_\_\_\_\_  
Project Name: North Lansing I, Triphammer Rd Conceptual Site Plan (C-503)  
Drawing Type: Wetlands Disturbance Plan  
Scale: 1" = 150'  
Drawing Number: C-503  
Sheet 10 of 13  
DRS2404  
PWGC Project Number: \_\_\_\_\_  
Drawing Date: \_\_\_\_\_  
Project Name: North Lansing I, Triphammer Rd Conceptual Site Plan (C-503)  
Drawing Type: Wetlands Disturbance Plan  
Scale: 1" = 150'

#### WETLANDS DISTURBANCE TABLE

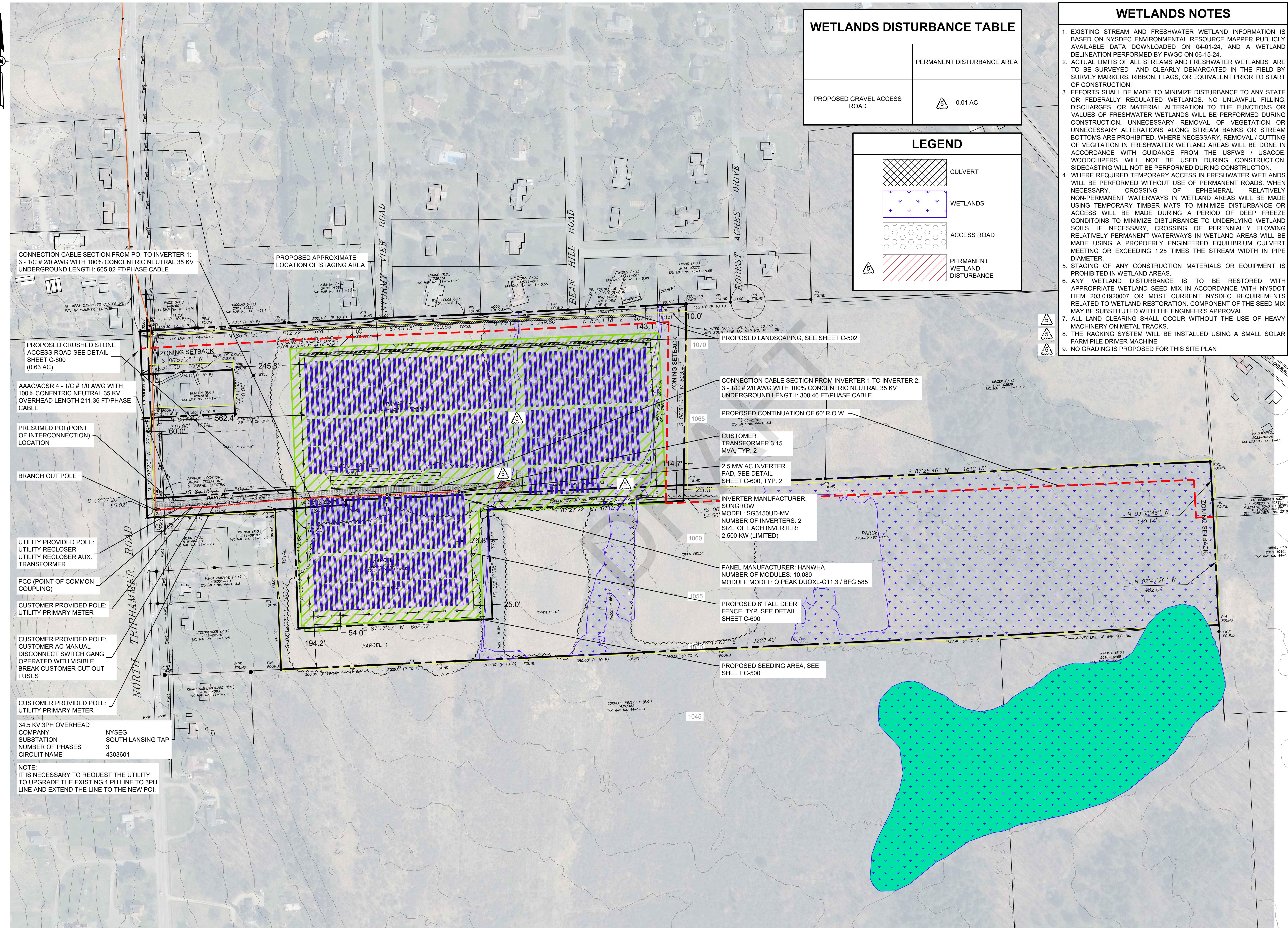
	PERMANENT DISTURBANCE AREA
PROPOSED GRAVEL ACCESS ROAD	0.01 AC

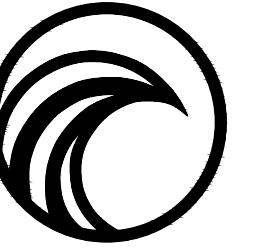
#### LEGEND



#### WETLANDS NOTES

- EXISTING STREAM AND FRESHWATER WETLAND INFORMATION IS BASED ON NYSDEC ENVIRONMENTAL RESOURCE MAPPER PUBLICLY AVAILABLE DATA DOWNLOADED ON 04-01-24, AND A WETLAND DELINEATION PERFORMED BY PWGC ON 06-15-24.
- ACTUAL LIMITS OF ALL STREAMS AND FRESHWATER WETLANDS ARE TO BE SURVEYED AND CLEARLY DEMARCATED IN THE FIELD BY SURVEY MARKERS, RIBBON, FLAGS, OR EQUIVALENT PRIOR TO START OF CONSTRUCTION.
- EFFORTS SHALL BE MADE TO MINIMIZE DISTURBANCE TO ANY STATE OR FEDERALLY REGULATED WETLANDS. NO UNLAWFUL FILLING, DISCHARGES, OR MATERIAL ALTERATION TO THE FUNCTIONS OR VALUES OF FRESHWATER WETLANDS WILL BE PERFORMED DURING CONSTRUCTION. UNNECESSARY REMOVAL OF VEGETATION OR UNNECESSARY ALTERATIONS ALONG STREAM BANKS OR STREAM BOTTOMS ARE PROHIBITED. WHERE NECESSARY, REMOVAL / CUTTING OF VEGETATION FRESHWATER WETLAND AREAS WILL BE DONE IN ACCORDANCE WITH GUIDANCE FROM THE USFWS / USACE. WOODCHIPS WILL NOT BE USED DURING CONSTRUCTION. SIDECASTING WILL NOT BE PERFORMED DURING CONSTRUCTION.
- WHERE REQUIRED TEMPORARY ACCESS IN FRESHWATER WETLANDS WILL BE PERFORMED WITHOUT USE OF PERMANENT ROADS WHEN NECESSARY. CROSSING OF Ephemeral RELATIVELY NON-PERMANENT WATERWAYS IN WETLAND AREAS WILL BE MADE USING TEMPORARY TIMBER MATS TO MINIMIZE DISTURBANCE OR ACCESS WILL BE MADE DURING A PERIOD OF DEEP FREEZE CONDITIONS TO MINIMIZE DISTURBANCE TO UNDERLYING WETLAND SOILS. IF NECESSARY, CROSSING OF PERENNIALLY FLOWING RELATIVELY PERMANENT WATERWAYS IN WETLAND AREAS WILL BE MADE USING A PROPERLY ENGINEERED EQUILIBRIUM CULVERT MEETING OR EXCEEDING 1.25 TIMES THE STREAM WIDTH IN PIPE DIAMETER.
- STAGING OF ANY CONSTRUCTION MATERIALS OR EQUIPMENT IS PROHIBITED IN WETLAND AREAS.
- ANY WETLAND DISTURBANCE IS TO BE RESTORED WITH APPROPRIATE WETLAND SEED MIX IN ACCORDANCE WITH NYS DOT ITEM 203.01920007 OR MOST CURRENT NYSDEC REQUIREMENTS RELATED TO WETLAND RESTORATION. COMPONENT OF THE SEED MIX MAY BE SUBSTITUTED WITH THE ENGINEER'S APPROVAL.
- ALL LAND CLEARING SHALL OCCUR WITHOUT THE USE OF HEAVY MACHINERY ON METAL TRACKS.
- THE RACKING SYSTEM WILL BE INSTALLED USING A SMALL SOLAR FARM PILE DRIVER MACHINE
- NO GRADING IS PROPOSED FOR THIS SITE PLAN





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CLIENT DRIVEN SOLUTIONS  
P.W. GROSSER CONSULTING INC.

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Phone: (631) 589-6353; Fax: (631) 589-8705  
E-mail: INFO@PWGROSSER.COM

**CONSULTANTS**

**SYSTEM SUMMARY**

**MODULE:**  
MANUFACTURER: HANWHA  
MODEL: Q.PEAK DUO XL-G11.3 /  
BFG  
MODULE OUTPUT POWER: 585 WP  
STRING SIZE: 24  
NUMBER OF STRINGS: 252  
MODULE QUANTITY: 6,048  
PV SYSTEM OUTPUT: 3,538.08 KWP DC

**COMBINER BOX:**  
CB QTY/INPUTS (QTY/INP): 11 CBs (6 INPUTS)  
12 CBs (5 INPUTS)

**INVERTER:**  
MANUFACTURER: SUNGROW  
MODEL: SG3150 UD-MV  
1 / 3,000 KW (LIMITED)  
PV SYSTEM OUTPUT: 3,000 KW AC  
DC SYSTEM VOLTAGE: 1,500 V

**MV INTERCONNECTION:**  
TRANSFORMER QTY/RATING:  
INTERCON. VOLTAGE: 2 / 3,425 KW  
3.45 KV

**RACKING:**  
MANUFACTURER: TBD  
CONFIGURATION: SAT - 1 MODULE PORTRAIT  
TILT: 45°  
AZIMUTH: 177°

7	WETLANDS UPDATE	11/11/2024
6	ACCESS ROAD UPDATE	11/01/2024
5	WATER LINE UPDATE	08/22/2024
4	LINE ROAD UPDATE	08/22/2024
3	CLIENT REVIEW	07/05/2024
2	WETLANDS UPDATE	07/24/2024
1	CLIENT REVIEW	04/05/2024
	Number Revision Description	Revision Date
	Designed By	Date Submitted
	Drawn By	Date Created
	Approved By	Scale

RPV/THS  
MTS  
03/28/24  
1" = 150'

NY LANSING II, LLC  
P.O. BOX 384  
CALICOON, NY 12783

**NORTH TRIPHAMMER ROAD  
SOLAR FARM CONCEPTUAL  
SITE PLAN**

Project Address: NORTH TRIPHAMMER ROAD  
TOWN OF LANSING  
TOMPKINS COUNTY, NEW YORK  
County Tax Map Number: 44-1-1.2 & 44-1-3.3  
Regulatory Reference Number: ---  
Title of Drawing: ---

**PROPOSED  
WETLANDS  
DISTURBANCE PLAN**

Drawing Number: C-502  
Sheet 9 of 12  
PWGC Project Number: DRS2404  
Unauthorized alteration or addition  
to this drawing and related documents  
is prohibited by law. Violation of this provision  
of the New York State Education Law

