



ANDREW M. CUOMO
Governor

RICHARD L. KAUFFMAN
Chair

DOREEN M. HARRIS
Acting President and CEO

**NYS Department of Agriculture and Markets – Agricultural Districts Law §305(4)
Short Form Notice of Intent to Undertake an Action Within an Agricultural District for
Solar Energy Projects Affecting Less than 30 acres in Soil Groups 1 - 4**

Instructions: The purpose of this form is to provide NYSERDA with the necessary information required to submit a Notice of Intent to the Department of Agriculture and Markets (NYSAGM) for the Project Developer. Please populate all fields in this template, as applicable, and return to NYSERDA, with a copy to commercial.industrialpv@nyserda.ny.gov, and upload as part of your NY-Sun Commercial/Industrial application. Please add additional documents if desired and include required maps and/or other figures as outlined below in the response sent to NYSERDA. **If the proposed project impacts more than 30 acres, please refer to the Long Form Notice of Intent Submission Form. NYSERDA has provided Contractors with mapping resources ([the interactive map is available here](#)) to assess the level of overlap that their Facility Area is expected to have on MSG 1-4.**

Provide, as part of your response package to NYSERDA, maps showing the site of the proposed action including the following:

1. The proposed solar array layout of the project on an aerial image.
2. Label or annotate the map with all affected landowners, including tax map numbers, surrounding land uses, and type(s) of agricultural production.
3. Label all points of interconnection with the public utilities, all transmission lines associated with the project, equipment storage or mobilization pads/construction areas, and access roads/driveways
4. A copy of the NRCS Web Soil Survey map of all affected parcels, including the breakdown of soils impacted (Soil Groups 1 - 4)¹.

I. Project Description and Agricultural Setting:

Project Address:	County:
Authority Having Jurisdiction:	Agricultural District:
Total Facility Area ² :	Total Parcel Size:
Impacted MSG Groups (1-4) within Facility Area:	

Project Name:
Public Entity: NYS Energy and Research Development Authority
Developer:

¹ Mineral Soils Group (MSG) 1-4 are defined by the NYS Department of Agriculture and Markets for each soil type in each county identified by the United State Department of Agriculture, and are used to classify the state’s agricultural lands based upon soil productivity and capability. Each county in New York State has a listing of all soil types present in the county that is associated with a specific mineral soil group, MSG 1 through 10. The interactive map of MSG 1-4 is available [here](#).

² The Facility Area is defined as all land area occupied during the commercial operation of the generation facility, the associated interconnection equipment and, if applicable, energy storage equipment as verified by NYSERDA through the Operational Certification process. Generally, this will include all areas within the facility’s perimeter security fence(s) and the applicable facility related improvements outside of fenced areas. The Facility Area shall include the area “inside the fence” of the project including all fencing inclosing the mechanical equipment such as the solar arrays, inverters, location of any combiner boxes, fuses, switches, meters, distribution boards, monitoring systems such as Balance of Systems components, interconnection equipment, and stormwater controls. The Facility Area shall additionally include improvements of the project “outside of the fence” including access roads, parking areas, stormwater controls and other permanent facilities, or structures installed at the Facility Area, except vegetative landscape screenings or appropriately buried utilities such as electrical conductors or conduit(s).

New York State Energy Research and Development Authority

Albany
17 Columbia Circle, Albany, NY 12203-6399
(P) 1-866-NYSERDA | (F) 518-862-1091
nyserda.ny.gov | info@nyserda.ny.gov

Buffalo
726 Exchange Street
Suite 821
Buffalo, NY
14210-1484
(P) 716-842-1522
(F) 716-842-0156

New York City
1359 Broadway
19th Floor
New York, NY
10018-7842
(P) 212-971-5342
(F) 518-862-1091

**West Valley Site
Management Program**
9030-B Route 219
West Valley, NY
14171-9500
(P) 716-942-9960
(F) 716-942-9961

II. Adverse Agricultural Effects:

Has the proposed action been approved by the affected local municipality?

Yes No

If no, please cite approvals which are still pending:

Is the parcel subdivided, or will the parcel be subdivided?

Yes No

If yes, will the parcels be merged after the system has been decommissioned? Yes No

Has the Project Company avoided and/or minimized impacts to prime soils in the consideration of the proposed layout?

Yes No

If no, please explain:

Will unaffected portions of any impacted farms remain in agricultural production?

Yes No

If yes, will the landowner have access to the remainder of the agricultural field?

Yes No

III. Alternatives to the Proposed Action:

Were other alternative sites considered within the same county?

Yes No

If no, please explain:

Were non-agricultural locations or locations outside of a State Certified, County Adopted Agricultural District considered?

Yes No

If no, please explain:

IV. Mitigation measures proposed:

NY-Sun supported Projects in Agricultural Districts are required to adopt the NYSAGM *Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands* (10/18/19) (Guidelines) in their entirety. Confirm both that the Guidelines will be adhered to in their entirety and include a signed copy with this filing.

- I confirm that the Project will conform to the NYSAGM Guidelines, in their entirety.
- Signed copy of Guidelines included in application.

Does the decommissioning plan ensure the project site will be restored to its previous condition upon decommissioning?

- Yes
- No

If no, please explain:

Additional mitigation measures proposed, if any:

When this form is completed, the Project Developer must provide his/her signature prior to submitting the form to NYSERDA.

David Norbut

Project Developer

Date

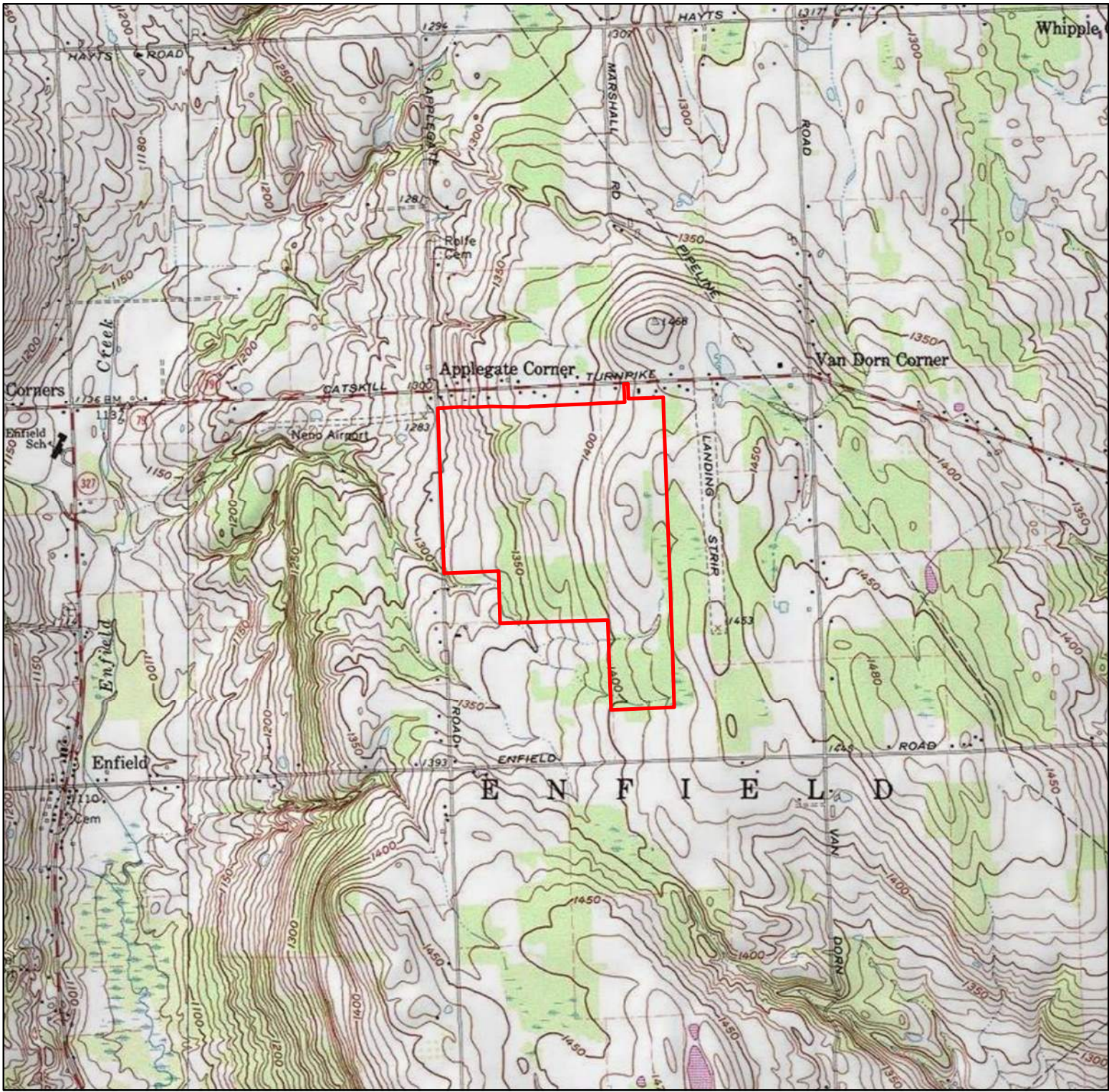
Enfield Solar Development Addendum to Agricultural Notice of Intent

Minor project-specific deviations and/or clarifications to Ag & Market's guidelines are noted in the bullet points below:

- *The utility line to the connection point has been designed as a buried line, with the exception of the final section near the eastern boundary of the parcel, which is approximately 150 ft in length. This portion of the line is required to be brought aboveground in order to connect to the grid and 4 new electrical poles. The proposed overhead structures will not impact farm areas outside of the solar array.*
- *Topsoil will be temporarily side-cast during cable trench installation. Although not shown on the Plan Set, the topsoil will be staged adjacent to the trench, will not be mixed with the subsoil, and will be replaced to original contours during restoration.*

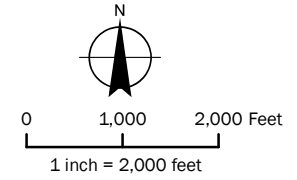
The Project will substantially comply with the NYSAGM Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands (10/18/19).

A P P E N D I X 1 - U S G S T O W N O F E N F I E L D Q U A D M A P



Norbut Solar Farms

Enfield Solar Development
56 Applegate Road S.
Ithaca, NY



Legend

Study Area

Sources:
 1. Study Area: Created by LaBella using information provided by the client.
 2. Basemap: Esri USA Topo Maps (2020) in reference to USGS Topographic Ithaca West Quadrangle (1978).

USGS Site Location

FIGURE 1

APPENDIX 2 -PRELIMINARY SITE PLAN

NOT FOR CONSTRUCTION

It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter in any way, if an item bearing the seal of an architect, engineer, or land surveyor is altered, the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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NORBUT SOLAR FARMS
1241 UNIVERSITY AVE.
ROCHESTER, NY 14607



ENFIELD SOLAR DEVELOPMENT
56 APPLEGATE RD. S
ENFIELD, NY 14850

NO.	DATE	DESCRIPTION
Revisions		
PROJECT NUMBER:	2203009	
DRAWN BY:	BER	
REVIEWED BY:	JT	
ISSUED FOR:	REVIEW	
DATE:	MARCH 2021	
DRAWING NAME:		

OVERALL SITE PLAN

DRAWING NUMBER:

C200

PROJECT DATA

PARCEL INFORMATION

APPLICANT	NORBUT SOLAR FARMS
PARCEL ADDRESS	56 APPLEGATE ROAD SOUTH, NY 14850
TAX NUMBER	9-1-28.1 / 9-1-27 / 9-1-11
PROJECT AREA	86.33 ACRES
EXISTING IMPERVIOUS WITHIN PROJECT AREA	BUILDINGS 0 SF CONCRETE 0 SF GRAVEL 3,282 SF TOTAL 0.07 AC
PROPOSED IMPERVIOUS WITHIN PROJECT AREA	BUILDINGS 0 SF CONCRETE 2,617 SF RES GRAVEL DRIVE 3 SF TOTAL 0.06 AC
PANEL COVERAGE	36.13 ACRES
TOTAL TEMPORARY DISTURBANCE AREA	93.85 ACRES

WETLAND INFORMATION

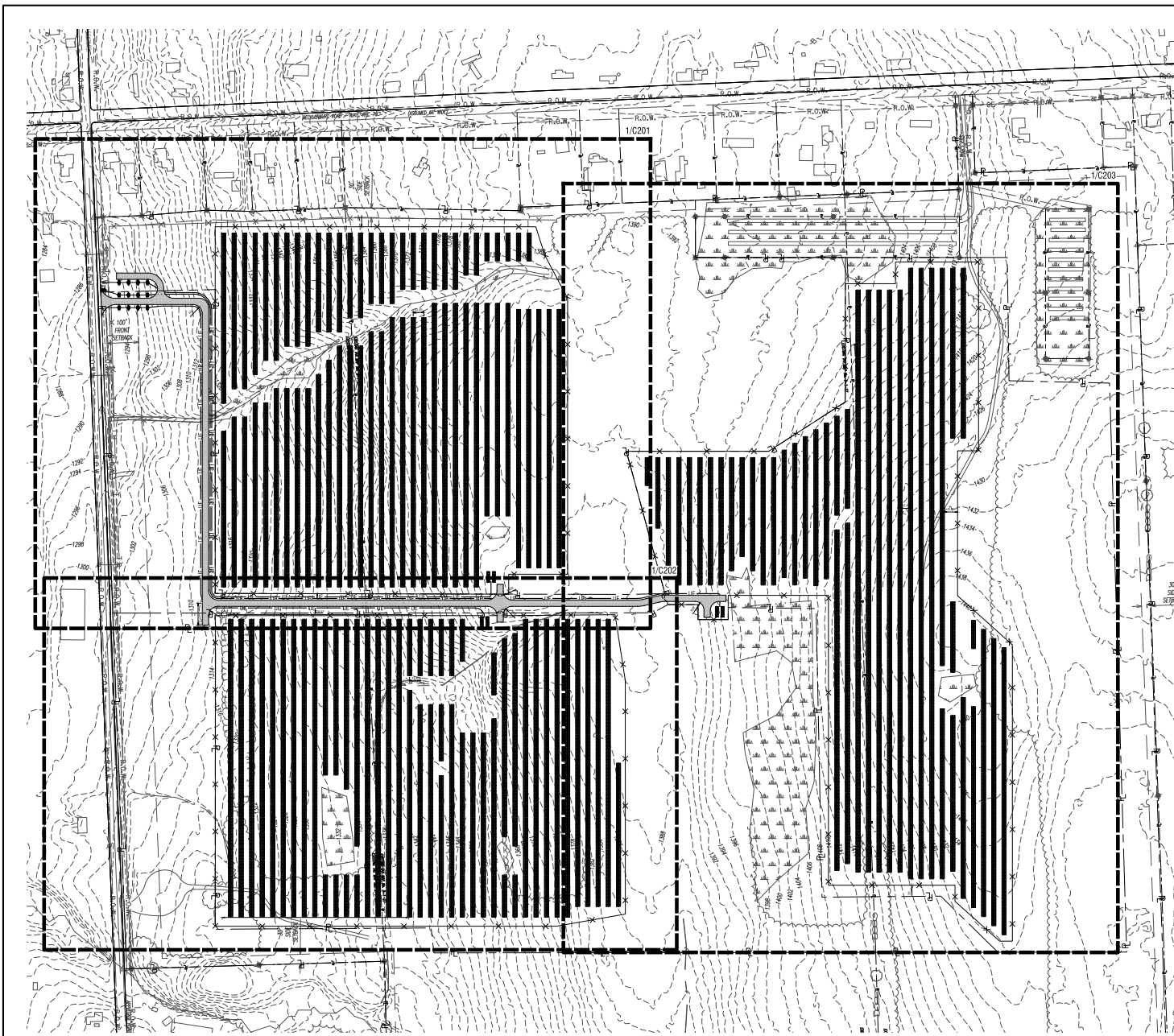
	EXISTING	PROPOSED
WETLANDS WITHIN PROJECT AREA	15.74 ACRES	15.74 ACRES

ZONING INFORMATION

	REQUIRED	PROPOSED
FRONT SETBACK	125 FT	125 FT
SIDE SETBACK	30 FT	30 FT
REAR SETBACK	30 FT	30 FT

LEGEND

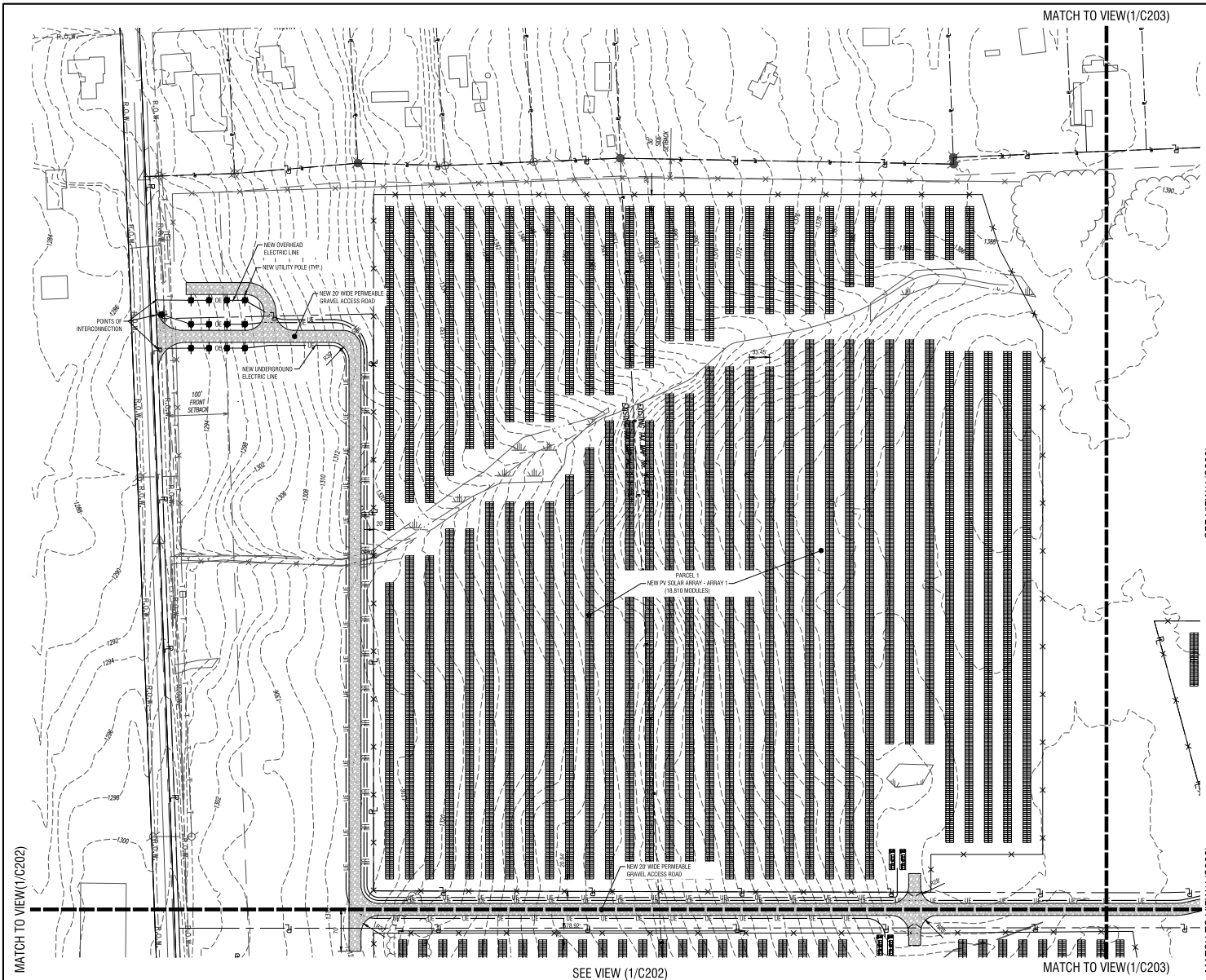
EXISTING	PROPOSED	DESCRIPTION
		ROADWAY CENTERLINES
		PERVIOUS GRAVEL PAVEMENT
		CHAIN LINK FENCE
		TREELINE
		BUILDING STRUCTURE
		PROPERTY LINE
		SETBACK LINE
		OVERHEAD ELECTRIC LINE
		UNDERGROUND ELECTRIC LINE
		MAJOR CONTOUR
		MINOR CONTOUR
		UTILITY POLE W/O LIGHT



1
C200 **OVERALL SITE PLAN**
SCALE: 1" = 150'



6/20/2019 11:45 AM BY: J. APPLEGATE (LOCAL) PARCEL 1 (1/1) 2203009 - ENFIELD SOLAR DEVELOPMENT (LOCAL) - SITE PLAN (DWG)



PROPOSED PARCEL 1 INFORMATION	
PARCEL AREA	49.69 ACRES
PARCEL COVERAGE (%)	29.39 ACRES (59%)



300 State Street, Suite 201
 Rochester, NY 14614
 585-454-6110
 labellapc.com

NOT FOR CONSTRUCTION

It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless acting under the direction of a licensed architect, professional engineer, or land surveyor, to alter in any way, or if an item bearing the seal of an architect, engineer, or land surveyor is altered, the altering architect, engineer, or land surveyor shall affix to the item their seal and notation "altered by" followed by their signature and date of such alteration, and a specific description of the alteration.

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NORBUT SOLAR FARMS
 1241 UNIVERSITY AVE.
 ROCHESTER, NY 14607



ENFIELD SOLAR DEVELOPMENT
 56 APPLEGATE RD. S
 ENFIELD, NY 14850

NO.	DATE	DESCRIPTION
Revisions		

PROJECT NUMBER: 2203009

DRAWN BY: BER

REVIEWED BY: JT

ISSUED FOR: REVIEW

DATE: MARCH 2021

DRAWING NAME:

**PARCEL 1
 SITE PLAN**

DRAWING NUMBER:

C201

1 SITE PLAN
 SCALE: 1" = 80'



MATCH TO VIEW(1/C202)

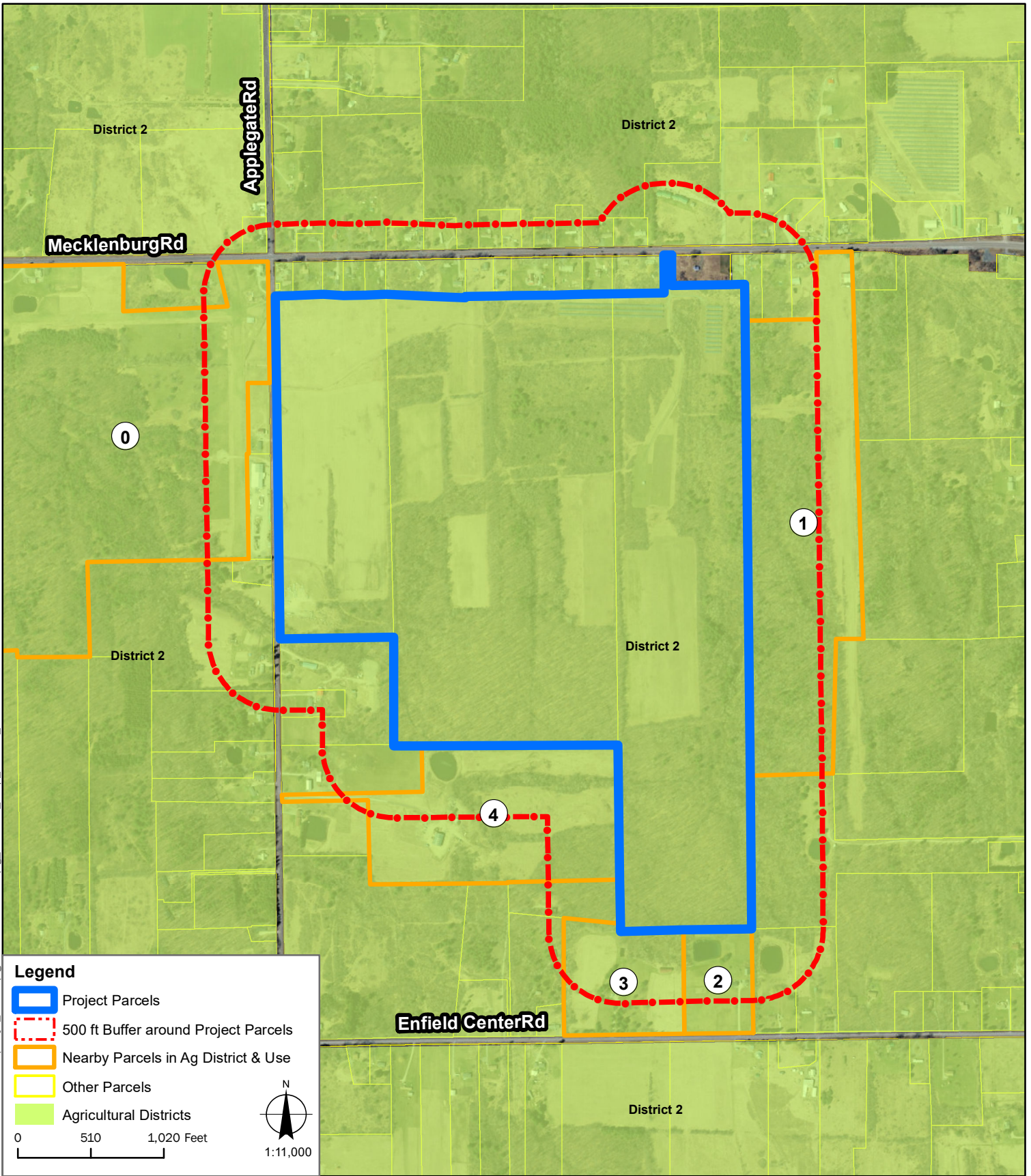
SEE VIEW (1/C202)

MATCH TO VIEW(1/C203)

SEE VIEW(1/C203)

MATCH TO VIEW(1/C202)

EXHIBIT 3 - AGRICULTURAL DISTRICT MAP



Legend

- Project Parcels
- 500 ft Buffer around Project Parcels
- Nearby Parcels in Ag District & Use
- Other Parcels
- Agricultural Districts

0 510 1,020 Feet

1:11,000

N

Sources:
 1. Agricultural Districts: CUGIR 2018
 2. Roads: TIGER 2010
 3. Municipal Boundaries: NYS GIS Program Office 2018

LaBella
 Powered by partnership.

**NORBUT
 SOLAR FARMS**

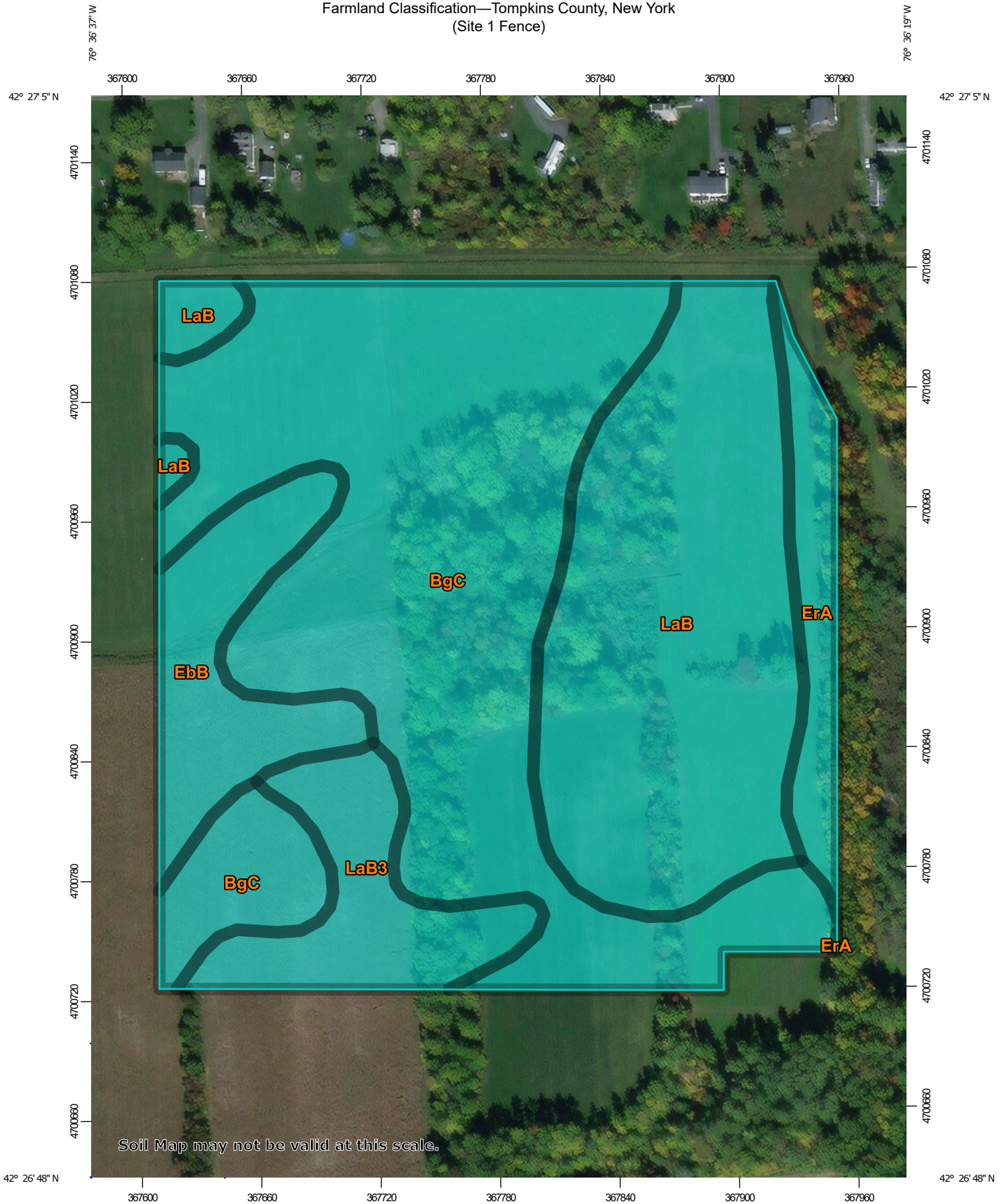
**ENFIELD
 SOLAR ARRAY**

LaBella Project No: 2203009
 Date: NOVEMBER 2020

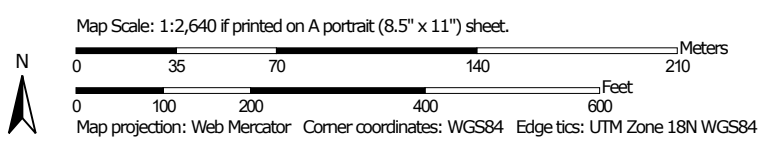
**AGRICULTURAL
 DATA MAP**

EXHIBIT 4 - FARMLAND CLASSIFICATION MAP

Farmland Classification—Tompkins County, New York
(Site 1 Fence)




Soil Map may not be valid at this scale.



Farmland Classification—Tompkins County, New York
(Site 1 Fence)









MAP LEGEND








Area of Interest (AOI)






 Area of Interest (AOI)








Soils



Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season









-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
































-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Farmland Classification—Tompkins County, New York
(Site 1 Fence)

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer	
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	Soil Rating Points		Not prime farmland		Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Prime farmland if drained		Prime farmland if irrigated and reclaimed of excess salts and sodium	
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if warm enough		Prime farmland if irrigated		Farmland of statewide importance	
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if thawed		Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season	
	Farmland of statewide importance, if irrigated				Farmland of local importance		Prime farmland if irrigated and drained		Farmland of statewide importance, if irrigated	
					Farmland of local importance, if irrigated		Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season			

Farmland Classification—Tompkins County, New York
(Site 1 Fence)

<p> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if irrigated and drained</p> <p> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</p> <p> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</p>	<p> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</p> <p> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough</p> <p> Farmland of statewide importance, if thawed</p> <p> Farmland of local importance</p> <p> Farmland of local importance, if irrigated</p>	<p> Farmland of unique importance</p> <p> Not rated or not available</p> <p>Water Features</p> <p> Streams and Canals</p> <p>Transportation</p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p>Background</p> <p> Aerial Photography</p>	<p>The soil surveys that comprise your AOI were mapped at 1:20,000.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>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.</p> </div> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>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.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Tompkins County, New York Survey Area Data: Version 16, Jun 11, 2020</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Aug 29, 2012—Nov 6, 2016</p> <p>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.</p>
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Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgC	Bath and Valois soils, 5 to 15 percent slopes	Farmland of statewide importance	14.3	48.7%
EbB	Erie channery silt loam, 3 to 8 percent slopes	Farmland of statewide importance	2.5	8.5%
ErA	Erie-Chippewa channery silt loams, 0 to 3 percent slopes	Farmland of statewide importance	1.4	4.9%
LaB	Langford channery silt loam, 2 to 8 percent slopes	Farmland of statewide importance	8.8	29.8%
LaB3	Langford channery silt loam, 3 to 8 percent slopes, eroded	Farmland of statewide importance	2.4	8.1%
Totals for Area of Interest			29.4	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

NYS SOIL CLASSIFICATION RATING

Map Unit Symbol	Map Unit Name	USDA Farmland Classification	NYS Farmland Mineral Soil Group Rating
BgC	Bath and Valois soils, 5 to 15 percent slopes	Farmland of Statewide Importance	5
EbB	Erie channery silt loam, 3 to 8 percent slopes	Farmland of Statewide Importance	6
ErA	Erie-Chippewa channery silt loams, 0 to 3 percent slopes	Farmland of Statewide Importance	6
LaB	Langford channery silt loam, 2 to 8 percent slopes	Farmland of Statewide Importance	3
LaB3	Langford channery silt loam, 3 to 8 percent slopes, eroded	Farmland of Statewide Importance	4

EXHIBIT 5 - NYSDAM GUIDELINES

NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS

Guidelines for Solar Energy Projects - Construction Mitigation for Agricultural Lands (Revision 10/18/2019)

The following are guidelines for mitigating construction impacts on agricultural land during the following stages of a solar energy project: Construction, Post-Construction Restoration, Monitoring and Remediation, and Decommissioning. These guidelines apply to project areas subject to ground disturbance¹ within agricultural lands including:

- Lands where agriculture use will continue or resume following the completion of construction (typically those lands outside of the developed project's security fence);
- Lands where the proposed solar development will be returning to agricultural use upon decommissioning, (typically those lands inside of the developed project's security fence);
- Applicable Area under review pursuant to Public Service Law Article 10 Siting of Major Electric Facilities.

The Project Company will incorporate these Guidelines into the development plans and applications for permitting and approval for solar projects that impact agricultural lands. If the Environmental Monitor, hereafter referred to as EM, determines that there is any conflict between these Guidelines and the requirements for project construction that arise out of the project permitting process, the Project Company and its EM, will notify the New York State Department of Agriculture and Markets (NYSDAM), Division of Land and Water Resources, and seek a reasonable alternative.

Environmental Monitor (EM)

The Project Company (or its contractor) shall hire or designate an EM to oversee the construction, restoration and follow-up monitoring in agricultural areas. The EM shall be an individual with a confident understanding of normal agriculture practices² (such as cultivation, crop rotation, nutrient management, drainage (subsurface and/or surface), chemical application, agricultural equipment operation, fencing, soils, plant identification, etc.) and able to identify how the project may affect the site and the applicable agricultural practices. The EM should also have experience with or understanding of the use of a soil penetrometer for compaction testing and record keeping. The EM may serve dual inspection roles associated with other Project permits and/or construction duties, if the agricultural workload allows. The EM should be available to provide site-specific agricultural information as necessary for project development through field review and direct contact with both the affected farm operators and NYSDAM. The EM should maintain regular contact with appropriate onsite project construction supervision and inspectors throughout the construction phase. The EM should maintain regular contact with the affected farm operator(s) concerning agricultural land impacted, management matters pertinent to the agricultural operations and the site-specific implementation of agricultural resource mitigation measures. The EM will serve as the agricultural point of contact.

¹Ground Disturbance is defined as an activity that contributes to measurable soil compaction, alters the soil profile or removes vegetative cover. Construction activities that utilize low ground pressure vehicles that do not result in a visible rut that alters soil compaction, is not considered a Ground Disturbance. Soil compaction should be tested using an appropriate soil penetrometer or other soil compaction measuring device. The soil compaction test results within the affected area will be compared with those of the adjacent unaffected portion of the agricultural area.

² An EM is not expected to have knowledge regarding all of the listed agricultural practices, but rather a general understanding such that the EM is able to perform the EM function.

1. For projects involving less than 50 acres of agricultural land within the limits of disturbance (LOD),³ the EM shall be available for consultation and/or on-site whenever construction or restoration work that causes Ground Disturbance is occurring on agricultural land.
2. For projects involving 50 acres or more of agricultural land within the (LOD) (including projects involving the same parent company whether phased or contiguous projects), the EM shall be on site whenever construction or restoration work requiring or involving Ground Disturbance is occurring on agricultural land and shall notify NYSDAM of Project activity. The purpose of the agency coordination would be to assure that the mitigation measures of these guidelines are being met to the fullest extent practicable. The Project Company and the NYSDAM will agree to schedule inspections in a manner that avoids delay in the work. NYSDAM requires the opportunity to review and will approve the proposed EM based on qualifications or capacities.

Construction Requirements

- Before any topsoil is stripped, representative soil samples should be obtained from the areas to be disturbed. The soil sampling should be consistent with Cornell University's soil testing guidelines, and samples should be submitted to a laboratory for testing PH, percent organic material, cation exchange capacity, Phosphorus/Phosphate (P), and Potassium/Potash (K). The results are to establish a benchmark that the soil's PH, Nitrogen (N), Phosphorus/Phosphate (P), and Potassium/Potash (K) are to be measured against upon restoration. If soil sampling is not performed, fertilizer and lime application recommendations for disturbed areas can be found at https://www.agriculture.ny.gov/ap/agservices/Fertilizer_Lime_and_Seeding_Recommendations.pdf.
- Stripped topsoil should be stockpiled from work areas (e.g. parking areas, electric conductor trenches, along access roads, equipment pads) and kept separate from other excavated material (rock and/or sub-soil) until the completion of the facility for final restoration. For proper topsoil segregation, at least 25 feet of additional temporary workspace (ATWS) may be needed along "open-cut" underground utility trenches. All topsoil will be stockpiled as close as is reasonably practical to the area where stripped/removed and shall be used for restoration on that particular area. Any topsoil removed from permanently converted agricultural areas (e.g. permanent roads, etc.) should be temporarily stockpiled and eventually spread evenly in adjacent agricultural areas within the project Limits of Disturbance (LOD) ; however not to significantly alter the hydrology of the area. Clearly designate topsoil stockpile areas and topsoil disposal areas in the field and on construction drawings; changes or additions to the designated stockpile areas may be needed based on field conditions in consultation with the EM. Sufficient LOD (as designated on the site plan or by the EM) area should be allotted to allow adequate access to the stockpile for topsoil replacement during restoration.
 - Topsoil stockpiles on agricultural areas left in place prior to October 31st should be seeded with Aroostook Winter Rye or equivalent at an application rate of three bushels (168 lbs.) per acre and mulched with straw mulch at rate of two to three bales per 1000 Sq. Ft.
 - Topsoil stockpiles left in place between October 31st and May 31st should be mulched with straw at a rate of two to three bales per 1000 Sq. Ft. to prevent soil loss.
- The surface of access roads located outside of the generation facility's security fence and constructed through agricultural fields shall be level with the adjacent field surface. If a level road design is not

³ The Limits of Disturbance (LOD) includes all project related ground disturbances and all areas within the project's security fencing.

feasible, all access roads should be constructed to allow a farm crossing (for specific equipment and livestock) and to restore/ maintain original surface drainage patterns.

- Install culverts and/or waterbars to maintain or improve site specific natural drainage patterns.
- Do not allow vehicles or equipment outside the planned LOD without the EM seeking prior approval from the landowner (and/or agricultural producer), and associated permit amendments as necessary. Limit all vehicle and equipment traffic, parking, and material storage to the access road and/or designated work areas, such as laydown areas, with exception the use of low ground pressure equipment.⁴ Where repeated temporary access is necessary across portions of agricultural areas outside of the security fence, preparation for such access should consist of either stripping / stockpiling all topsoil linearly along the access road, or the use of timber matting.
- Proposed permanent access should be established as soon as possible by removing topsoil according to the depth of topsoil as directed by the EM. Any extra topsoil removed from permanently converted areas (e.g. permanent roads, equipment pads, etc.) should be temporarily stockpiled and eventually spread evenly in adjacent agricultural areas within the project Limits of Disturbance (LOD); however not to significantly alter the hydrology of the area.
- When open-cut trenching is proposed, topsoil stripping is required from the work area adjacent to the trench (including segregated stockpile areas and equipment access). Trencher or road saw like equipment are not allowed for trench excavation in agricultural areas, as the equipment does not segregate topsoil from subsoil. Horizontal Directional Drilling (HDD) or equivalent installation that does not disrupt the soil profile, may limit agricultural ground disturbances. Any HDD drilling fluid inadvertently discharged must be removed from agricultural areas. Narrow open trenches less than 25 feet long involving a single directly buried conductor or conduit (as required) to connect short rows within the array, are exempt from topsoil segregation.
- Electric collection, communication and transmission lines installed above ground can create long term interference with mechanized farming on agricultural land. Thus, interconnect conductors outside of the security fence must be buried in agricultural fields wherever practicable. Where overhead utility lines are required, (including Point(s) of Interconnection) installation must be located outside field boundaries or along permanent access road(s) wherever possible. When overhead utilities must cross farmland, minimize agricultural impacts by using taller structures that provide longer spanning distances and locate poles on field edges to the greatest extent practicable.
- All buried utilities located **within** the generation facility's security fence must have a minimum depth of 18-inches of cover if buried in a conduit and a minimum depth of twenty-four inches of cover if directly buried (e.g. not routed in conduit).⁵
- The following requirements apply to all buried utilities located **outside** of the generation facility security fence:
 - In cropland, hayland, and improved pasture buried electric conductors must have a minimum depth of 48-inches of cover. In areas where the depth of soil over bedrock is less than 48-inches, the

⁴ low ground pressure vehicles that do not result in a visible rut that alters soil compaction.

⁵ Burial of electrical conductors located within the energy generation facility may be superseded by more stringent updated electrical code or applicable governing code.

electric conductors must be buried below the surface of the bedrock if friable/rippable, or as near as possible to the surface of the bedrock.

- In unimproved grazing areas or on land permanently devoted to pasture the minimum depth of cover must be 36-inches.
- Where electrical conductors are buried directly below the generation facility's access road or immediately adjacent (at road edge) to the access road, the minimum depth of cover must be 24-inches. Conductors must be close enough to the road edge as to be not subject to agricultural cultivation / sub-soiling.
- When buried utilities alter the natural stratification of soil horizons and natural soil drainage patterns, rectify the effects with measures such as subsurface intercept drain lines. Consult the local Soil and Water Conservation District concerning the type of intercept drain lines to install to prevent surface seeps and the seasonally prolonged saturation of the conductor installation zone and adjacent areas. Install and/or repair all drain lines according to Natural Resources Conservation Service conservation practice standards and specifications. Drain tile must meet or exceed the AASHTO M-252 specifications. Repair of subsurface drains tiles should be consistent with the NYSDAM's details for "*Repair of Severed Tile Line*" found in the pipeline drawing A-5 (<http://www.agriculture.ny.gov/ap/agsservices/Pipeline-Drawings.pdf>).
- In pasture areas, it may be necessary to construct temporary fencing (in addition to the Project's permanent security fences) around work areas to prevent livestock access to active construction areas and areas undergoing restoration. For areas returning to pasture, temporary fencing will be required to delay the pasturing of livestock within the restored portion of the LOD until pasture areas are appropriately revegetated. Temporary fencing including the project's required temporary access for the associated fence installations should be included within the LOD as well as noted on the construction drawings. The Project Company will be responsible for maintaining the temporary fencing until the EM determines that the vegetation in the restored area is established and able to accommodate grazing. At such time, the Project Company should be responsible for removal of the temporary fences.

Post-Construction restoration requirements applicable to continued use agricultural areas that suffered ground disturbance due to construction activities (typically lands outside of the developed project's security fence).

- All construction debris in active agriculture areas including pieces of wire, bolts, and other unused metal objects will need to be removed and properly disposed of as soon as practical to prevent mixing with any topsoil.
- Excess concrete will not be buried or left on the surface in active agricultural areas. Concrete trucks will be washed outside of active agricultural areas. Remove all excess subsoil and rock unearthed from construction related activities occurring in areas intended to return to agricultural use. On-site disposal of such material is not permissible in active agricultural lands. Designated spoil disposal locations should be specified in the associated construction plans. If landowner agreements, LOD boundary, or Project's land use approvals do not allow for on-site disposal, material must be removed from the site.⁶

⁶ Any permits necessary for disposal under local, State and/or federal laws and regulations must be obtained by the facility operator, with the cooperation of the landowner when required.

- Excess stripped topsoil shall not be utilized for fill within the project area. Any extra topsoil removed from permanently impacted areas (e.g. roads, equipment pads, etc.) should be evenly spread in adjacent agricultural project areas, however not to significantly alter the hydrology of the area.
- Regrade all access roads outside of the security fencing (as determined necessary by the EM), to allow for farm equipment crossing and restore original surface drainage patterns, or other drainage pattern incorporated into the design.
- Repair all surface or subsurface drainage structures damaged during construction as close to preconstruction conditions as possible, unless said structures are to be removed as part of the project design. Correct any surface or subsurface drainage problems resulting from construction of the solar energy project with the appropriate mitigation as determined by the Environmental Monitor, Soil and Water Conservation District and the Landowner.
- On agricultural land needing restoration because of ground disturbance, postpone any restoration practices until favorable (workable, relatively dry) topsoil/subsoil conditions exist. Restoration must not be conducted while soils are in a wet or plastic state of consistency. Stockpiled topsoil must not be regraded, and subsoil must not be decompacted until plasticity, as determined by the Atterberg field test, is adequately reduced. No permanent project restoration activities shall occur in agricultural areas between the months of October through May unless favorable soil moisture conditions exist.
- In all continued use agricultural land where the topsoil was stripped, subsoil decompaction shall be conducted prior to topsoil replacement. Following construction, all such areas will be decompacted to a depth of 18 inches with a tractor mounted deep ripper or heavy-duty chisel plow. Soil compaction results shall be no more than 250 pounds per square inch (PSI) throughout the decompacted 18 inches as measured with a soil penetrometer. Following decompaction, all rocks 4 inches and larger in size unearthed from decompaction will be removed from the surface of the subsoil prior to replacement of the topsoil. The topsoil will be replaced to original depth and the original contours will be reestablished where possible. All rocks 4 inches and larger from topsoil shall be removed from the surface of the topsoil. Subsoil decompaction and topsoil replacement must be avoided after October 1, unless approved on a site-specific basis by the landowner in consultation with NYSDAM. All parties involved must be cognizant that areas restored after October 1st may not obtain sufficient growth for stabilization⁷ to prevent erosion over the winter months. If areas are to be restored after October 1st, necessary provisions must be made to prevent potential springtime erosion, as well as restore any eroded areas in the springtime, to establish proper growth. Excess stripped topsoil shall be evenly spread in the adjacent project areas, or adjacent agricultural areas (within the LOD), however, not to significantly alter the hydrology of the area.
- In all continued use agricultural areas where the topsoil was not stripped, including timber matted areas, the EM shall determine appropriate activities to return the area to agricultural use. These activities may include decompaction, rock removal, and revegetation. Soil compaction should be tested in the affected areas and the affected area's adjacent undisturbed areas using an appropriate soil penetrometer or other soil compaction measuring device as soon as soils achieve moisture equilibrium with adjacent unaffected areas. Compaction tests will be made at regular intervals of distance throughout the affected areas, including each soil type identified within the affected areas. Soil compaction results shall be measured with a soil penetrometer not exceeding more than 250 pounds per square inch (PSI), by

⁷ Sufficient growth for stabilization should be determined by comparison with unaffected crop production. Annual crops restored after normal planting window (as determined by the landowner or associated producer) should be stabilized with Aroostook Winter Rye at the rate of 150/100 lbs. per acre (broad cast/drill seeder).

comparing probing depths of both the affected and unaffected areas. Where representative soil density of the affected area's collective depth measurements present compaction restrictions exceeding an acceptable deviation of no more than 20% from the adjacent undisturbed area's mean soil density, additional decompaction may be required to a depth of 18-inches with a tractor mounted deep ripper or heavy-duty chisel plow. Following decompaction, remove all rocks unearthed from decompaction activities 4 inches and larger in size from the surface. Revegetation shall be performed in accordance with the instructions below.

- Seed all agricultural areas from which the vegetation was removed or destroyed with the seed mix specified by the landowner/agriculture producer or as otherwise recommended in the Department's fertilizer, lime and seeding guideline: [https://www.agriculture.ny.gov/ap/agservices/Fertilizer_Lime_and_Seeding_Recommendations.pdf]. Soil amendments should be applied as necessary so that restored agricultural areas' soil properties, at minimum, reasonably reflect the pre-construction soil test results or as otherwise agreed to by the involved parties to ensure continued agricultural use. All parties must be cognizant that areas restored after October 1st may not obtain sufficient growth to prevent erosion over the winter months. If areas are to be restored after October 1st, necessary provisions must be made to restore and/or re-seed any eroded or poorly germinated areas in the springtime, to establish proper growth.

Monitoring and Remediation

Project Companies shall provide a monitoring and remediation period of one complete growing season following the date upon which the desired crop is planted. All projects subject to NYS Public Service Law Article 10 will provide a monitoring period of two complete growing seasons following the date upon which the project achieves the establishment of the desired crop.

On site monitoring shall be conducted seasonally at least three times during the growing season (Spring, Summer, Fall). Monitoring is required to identify any remaining impacts directly associated with the construction of the project on agricultural lands proposed to remain or resume agriculture production, including the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring observations can be made. NYSDAM expects the Project Company (or its contractor) to retain the EM for follow-up monitoring and remediation (as needed) in agricultural areas. Monitoring is limited to the restored agricultural area. Non-project related impacts affecting the restored project area will be discussed with NYSDAM staff and considered for omission from future monitoring and remediation. The EM is expected to record the following observations from onsite inspections:⁸

- **Topsoil Thickness and Trench Settling** – The EM observations may require small hand dug holes to observe the percentage of settled topsoil in areas where the topsoil was stripped, or trenching was performed without stripping topsoil. Observations concerning depth of topsoil deficiencies shall require further remediation by re-appropriating additional topsoil. Acceptable materials for remediation are: known areas of native excess topsoil (according to records of project specific excess topsoil disposal spread within the original LOD) or imported topsoil free of invasive species that is consistent with the quality of topsoil on the affected site.

⁸ The activities that follow are not necessary for restored agricultural lands on which the farmer or landowner has commenced activities, including agricultural activities or other use that tend to reverse restoration or create conditions that would otherwise trigger restoration. Should NYSDAM contend upon inspection that conditions indicate that post-construction restoration activities were improperly performed or insufficient, NYSDAM may inform the project company and NYSERDA for further investigation and remediation.

- **Excessive Rock (>4-inches)** - Determined by a visual inspection of disturbed areas as compared to unaffected portions of the same field located outside the construction area. Observations concerning excess stone material in comparison to off-site conditions shall require further remediation including removal and disposal of all excess rocks and large stones.
- **Soil Compaction** - Project affected agricultural soils should be tested using an appropriate soil penetrometer or other soil compaction measuring device. Compaction tests will be made at regular intervals of distance throughout the access or work areas, including each soil type identified on the affected agricultural areas. Where representative soil density of the affected area exceeds the representative soil density of the unaffected areas, additional decompaction may be required. Consultation with NYSDAM staff and the agricultural producer(s) should be conducted prior to scheduling additional decompaction. If warranted, decompaction to a depth of 18-inches with a tractor mounted deep ripper or heavy-duty chisel plow. Restoration of displaced topsoil to original depth and re-establish original contours where possible. Decompaction deep shattering will be applied during periods of relatively low soil moisture to ensure the desired mitigation and to prevent additional soil compaction. Oversized stone/rock (Four-inches) material that is uplifted/unearthed to the surface as a result of the deep shattering will be removed.
- **Drainage** – The EM shall visually inspect the restored agricultural areas in search of pervasive stunted crop growth due to seasonal saturation, not previously experienced at the site and not resulting from the agricultural producer’s irrigation management or due to excessive rainfall. Identified areas of stunted crop growth shall be compared to the nearest undisturbed adjacent areas under a substantially equivalent terrain and crop management plan. Drainage observations should be evaluated to determine if the project affected surface or sub-surface drainage during construction or restoration. Project caused drainage issues affecting or likely to reduce crop productivity of the adjacent areas will have to be remediated via a positive surface drainage, sub-surface drainage repair or an equivalent.
- **Agriculture Fencing and Gates** – The EM shall inspect Project associated fencing and gates (installed, altered or repaired) within the Project’s LOD associated with agricultural activities for function and longevity. The Project Company is responsible during the Monitoring and Remediation Phase for maintaining the integrity of Project associated fencing and gates.

The Project Company (or its contractor) shall consolidate each applicable growing season’s observations into an annual report during the monitoring period and shall be provided upon request to NYSDAM. Annual reports should include date stamped photographs illustrating crop growth in comparison with unaffected portions the agricultural areas.

The EM shall record observations of the establishment of the desired crop and subsequent crop productivity within restored agricultural areas and shall be evaluated by comparing its productivity to that of the nearest adjacent undisturbed agricultural land of similar crop type within the same field. If a decline in crop productivity is apparent the Project Company as well as other appropriate parties must determine whether the decline is due to project activities. If project activities are determined to be the primary detrimental factor, the project EM will notify NYSDAM concerning unsuccessful restoration and to potentially schedule a NYSDAM staff field visit. If project restoration is determined to be insufficient, the Project Company will develop a plan for appropriate rehabilitation measures to be implemented. NYSDAM staff will review and approve said plan prior to implementation. Additional monitoring may be required depending on additional restoration activities needed.

