



RIVERSIDE SOLAR, LLC

Matter No. 21-00752

900-2.16 Exhibit 15

Agricultural Resources

Contents

Acronym List iii

Glossary Terms v

Exhibit 15: Agricultural Resources 1

 15(a) Assessment of Agricultural Resources 1

 (1) NYS Certified Agricultural Districts 1

 (2) Real Property Agricultural Value Assessment 2

 (3) Zoning Districts or Overlay Zones 2

 (4) Agricultural Land Use Compared to Non-agricultural Land Uses 4

 (5) Existing Energy Infrastructure and Completed Renewable Energy Facilities 6

 (6) Active Agricultural Businesses, Facilities, and/or Infrastructure 7

 (7) Potential Construction Impacts and Methods to Facilitate Farming 8

 (8) Temporary and Permanent Impacts on Agricultural Resources 9

 15(b) Agricultural Resource Maps 9

 (1) Agricultural Land Use 10

 (2) Production Acreage Retained for Agricultural Use 11

 (3) Landowner Imposed Development Restrictions 12

 (4) Agricultural Drainage Systems 12

 (5) USDA Soil Map 12

 (6) NYS Agricultural Land Classification Mineral Soil Group Map 18

 15(c) Agricultural Plan 19

 15(d) Drainage Remediation Plan 19

 (1) Likelihood of Drainage Impacts Within and Adjacent to the Facility 20

 (2) Anticipated Repair Methods 21

 15(e) Feasibility of Agricultural Co-utilization 21

Conclusions 21

References 23

Tables

Table 15-1. Cropland within the Facility Site and Study Area4
Table 15-2. Agricultural Use by Parcel within the Facility Site10
Table 15-3. Mapped Soils within the Facility Site and Study Area12

Figures

Figure 15-1. Cropland Data Layer
Figure 15-2. Location of Drainage Features within the Facility Site
Figure 15-3. Agricultural Soils within the Facility Site

Appendices

Appendix 15-1. Real Property Agricultural Assessment Records
Appendix 15-2. Agricultural Viability Landowner Survey and Responses
Appendix 15-3. Agricultural Plan
Appendix 15-4. Drainage Remediation Plan

Acronym List

AES	The AES Corporation, Inc.
AR	Agricultural and Residential
AR-1	Agricultural and Residential-1
AR-2	Agricultural and Residential-2
AR-3	Agricultural and Residential-3
BMPs	best management practices
B	Business
BR	Business Residential
C	Commercial
CDL	Cropland Data Layer
EM	Environmental Monitor
H	Hamlet
I, ID, IND	Industrial
L-1	Light Industrial
LOD	limit of disturbance
MU	Multi-use
MSG	Mineral Soil Group
NASS	National Agricultural Statistics Service
NLCD	National Land Cover Database
NYSAGM	New York State Department of Agriculture and Markets
NYCRR	New York Codes, Rules and Regulations
NYSDPS	New York State Department of Public Service
NYSORPTS	New York State Office of Real Property Tax Services
ORES	Office of Renewable Energy Siting
R-1	Single-Family Residential
R2	Single and Two-Family Residential
R-3	Multiple Family Residential
R-4	Single and Two-Family Residential
RN	Residential Neighborhoods
RS	Residential Shoreline
RS-2	Residential Shoreline-2

SEIA	Solar Energy Industries Association
USCs	Uniform Standards and Conditions
USDA	United States Department of Agriculture
WF	Waterfront

Glossary Terms

Applicant	Riverside Solar, LLC, a subsidiary of The AES Corporation, Inc. (AES), the entity seeking a siting permit for the Facility from the Office of Renewable Energy Siting (ORES) under Section 94-c of the New York State Executive Law.
Facility	The proposed components to be constructed for the collection and distribution of energy for the Riverside Solar Project, which includes solar arrays, inverters, electric collection lines, and the collection substation.
Facility Site	The parcels encompassing Facility components which totals 1,168 acres in the Towns of Lyme and Brownville, Jefferson County, New York (Figure 2-1).
Limits of Disturbance	The area to which construction impacts will occur, totaling approximately 628 acres.
Study Area	In accordance with the Section 94-c Regulations, the Study Area for the Facility includes a radius of five miles around the Facility Site boundary, unless otherwise noted for a specific resource study or Exhibit. The 5-mile Study Area encompasses 79,169 acres, inclusive of the 1,168-acre Facility Site.
Towns	The Towns of Lyme and Brownville, Jefferson County, New York.

Exhibit 15: Agricultural Resources

This Exhibit provides information required in accordance with the requirements of §900-2.16 of the Section 94-c Regulations.

15(a) Assessment of Agricultural Resources

This section includes an assessment within the five-mile Study Area on the NYS Certified Agriculture Districts, Real Property Agricultural Value Assessment, Zoning Districts, Agricultural Land Use Compared to Non-agricultural Land Uses, Existing Energy Infrastructure and Completed Renewable Energy Facilities, and Active Agricultural Businesses, Facilities, and/or Infrastructure.

(1) NYS Certified Agricultural Districts

Within Jefferson County there are three certified agricultural districts. The Facility Site is located entirely within Jefferson County Agricultural District 2. Agricultural District 2 consists of 112,653 acres, of which 92,245 acres are farmed (New York State Department of Agriculture and Markets [NYSAGM], 2021a). Agricultural District 2 was created on January 22, 1984 and is up for an 8-year review on January 22, 2024 (NYSAGM, 2021b). Within the Study Area there are approximately 25,788 acres of land designated as agricultural districts. Of the 10 parcels within the Facility Site, 7 are land designated as an agricultural district. Of the 7 parcels designated as agricultural districts within the Facility Site, 3 parcels are currently enrolled in within the Town of Lyme and 4 parcels are currently enrolled within the Town of Brownville. All are enrolled in Jefferson County Agricultural District 2. This account for 5.2 percent of agricultural district land within the Town of Lyme and 7.82 percent within the Town of Brownville. Tax parcels within certified agricultural districts within the Facility Site are inventoried below and can be viewed on Figure 3-4 in Exhibit 3.

- Tax Parcel No.: 62.00-1-7.31
- Tax Parcel No.: 62.00-1-7.32
- Tax Parcel No.: 62.00-1-62.1
- Tax Parcel No.: 62.00-1-61.1
- Tax Parcel No.: 62.00-2-12
- Tax Parcel No.: 62.00-2-11

- Tax Parcel No.: 62.00-2-13.22

(2) Real Property Agricultural Value Assessment

The NYSAGM in conjunction with the New York State Department of Taxation and Finance administer the agricultural assessment program (NYSAGM, 2021c). This program allows landowners to receive a reduction in property tax bills for land in agricultural production based on the agricultural assessment values determine through the New York State Land Classification System (NYSAGM, 2021c). In order to gather this information, the Applicant consulted with assessors of the towns located within the five-mile Study Area including the Town of Lyme, Town of Brownville, Town of Clayton, Town of Orleans, Town of Hounsfield, Village of Chaumont, and the Village of Dexter. The Applicant requested records of parcels within each town or village that receive a Real Property Agricultural Assessment. Based on the records provided, there are 72 parcels within the Town of Lyme and 44 parcels within the Town of Brownville receiving Real Property Agricultural Assessments. These results also encompass the Village of Chaumont and the Village of Dexter. This includes parcels 62.00-2-12 and 62.00-2-13.22 in the Town of Lyme and parcel 62.00-1-61.1 in the Town of Brownville that are within the Facility Site. Additionally, there are 59 parcels within the Town of Orleans receiving Real Property Agricultural Assessments. Records were requested from the Towns of Clayton and Hounsfield but were not received by the time of filing. The records received by the Applicant have been included as Appendix 15-1 of this Exhibit.

(3) Zoning Districts or Overlay Zones

The proposed Facility is located within the Towns of Lyme and Brownville (Towns) in Jefferson County, New York. The Facility Study Area consists of several townships and villages, including the Town of Lyme, Town of Brownville, Town of Clayton, Town of Orleans, Town of Hounsfield, Village of Chaumont and the Village of Dexter. Existing and proposed zoning districts within the Study Area and the associated permitted and prohibited uses have previously been discussed in Exhibit 3. Zoning within the Study Area can be viewed on Figure 3-3.

Town of Lyme

Within the Town of Lyme ground mounted and commercial solar energy systems are allowed by special use permit within the Agricultural and Rural Residential Agricultural and Rural

Residential (AR) district. Within the Waterfront (WF) district commercial solar energy systems are not permitted and ground mounted solar is permitted by special use. Within the Town of Lyme there are five Facility parcels within the AR zoning district. There are no Facility parcels proposed within the WF district.

Town of Brownville

Solar energy systems and large-scale photovoltaic energy systems are allowed with a Special Use Permit within the Agricultural and Residential-1 (AR-1), Agricultural and Residential-2 (AR-2), and Agricultural and Residential-3 (AR-3) districts. Within the Residential Neighborhoods (RN), Residential Shoreline (RS), Residential Shoreline-2 (RS-2), and Hamlet (H) districts Solar energy systems are allowed with special use permit. Within the Town of Brownville there are four Facility parcels within the AR-2 zoning district. There are no Facility parcels proposed in any other zoning district within the Town of Brownville.

Town of Clayton

Large scale solar energy systems are allowed with special use permit within the Agricultural and Rural Residential (AR) and Industrial (ID) districts. There are no proposed Facility parcels within the Town of Clayton.

Town of Orleans

Large scale solar energy systems are allowed with a special use permit within the Agricultural and Rural Residential (AR), Business (B) district, and Industrial (IND) districts. There are no proposed Facility parcels within the Town of Orleans.

Town of Hounsfeld

Large scale solar energy systems are allowed with a special use permit within the Agricultural and Residential (AR), Multi-use (MU) district, and Industrial (I) districts. There are no proposed Facility parcels within the Town of Hounsfeld.

Village of Chaumont

Solar energy systems are currently not an allowed use within any of the zoning districts. If a use that is not already defined within the Village's land development code is determined to be similar

in character to any of the zoning districts above, then it will be allowed by the Village. If the use is determined to not be in line with the character of the above zoning districts then it becomes subject to the site plan review process. There are no proposed Facility parcels within the Village of Chaumont.

Village of Dexter

Solar collectors are permitted by special use with the Single-Family Residential (R-1) district, the Single and Two-Family Residential (R2) district, the Multiple Family Residential (R-3) district, Single and Two-Family Residential (R-4) district, Commercial (C) district, and Light Industrial (L-1) district. There are no proposed Facility parcels within the Village of Dexter.

(4) Agricultural Land Use Compared to Non-agricultural Land Uses

According to the most recent United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) Cropland Data Layer (CDL) there are 16,602 acres of agriculture land within the Study Area (i.e. corn, soybeans, sweet corn, winter wheat, speltz, alfalfa, other hay/non alfalfa, buckwheat, fallow/idle cropland, grass/pasture) covering approximately 21 percent of the total land cover within the Study Area. The remaining 62,567 acres of land cover, or 79 percent of the Study Area, consists of non-agriculture land cover (i.e. disturbed, developed, woodland/forested area, successional non-agriculture areas, wetlands, open water).

Of the approximately 1,168 acres within the Facility Site there are approximately 407 acres of agricultural land as identified by the CDL, accounting for roughly 35 percent of the total Facility Site. The remaining approximately 761 acres of land, or 65 percent of the Facility Site consist of non-agricultural uses.

Table 15-1 summarizes the land cover within the Facility Site and the Study Area according to the USDA 2020 CDL and results can be seen on Figure 15-1.

Table 15-1. Cropland within the Facility Site and Study Area

Category	Acreage within Facility Site	Acreage within Study Area
Corn	6.9	2080.9

Table 15-1. Cropland within the Facility Site and Study Area

Category	Acreage within Facility Site	Acreage within Study Area
Sorghum	0	7.6
Soybeans	40	810.6
Sweet Corn	0.2	1.1
Barley	0	9.8
Spring Wheat	0	0.4
Winter Wheat	1.1	276.7
Rye	0	5.1
Oats	0.4	58.5
Speltz	0.2	0.9
Alfalfa	4.9	253.1
Other Hay/Non Alfalfa	334.5	12427.9
Buckwheat	3.6	44
Dry Beans	0	0.2
Peas	0	0.2
Clover/Wildflowers	0	4.4
Sod/Grass Seed	0	0.9
Fallow/Idle Cropland	14.9	604.9
Cherries	0	0.7
Apples	0	4.7
Grapes	0	0.2
Christmas Trees	0	4
Open Water	9.8	10544.5
Developed/Open Space	19.8	2146.3
Developed/Low Intensity	6.9	1532.7
Developed/Medium Intensity	0.2	297.3
Developed/High Intensity	0	35.8
Barren	0.2	51.4
Deciduous Forest	160.6	18439.4

Table 15-1. Cropland within the Facility Site and Study Area

Category	Acreage within Facility Site	Acreage within Study Area
Evergreen Forest	12.5	937.6
Mixed Forest	2.4	169
Shrubland	14.9	2299.3
Grass/Pasture	456.1	20204.8
Woody Wetlands	65.8	5152.4
Herbaceous Wetlands	11.8	757.5
Triticale	0	2.9
Garlic	0	0.2
Pumpkins	0	0.2
Blueberries	0	0.7
Cabbage	0	0.2

(5) Existing Energy Infrastructure and Completed Renewable Energy Facilities

Existing utility and energy infrastructure including existing overhead and underground lines for gas and electric have previously been discussed in Exhibit 3 and are included on Figure 3-4. The closest active wind turbines are the Copenhagen Wind Farm approximately 18 miles southeast of the Study Area (United States Geologic Survey [USGS], 2020). The two closest major solar systems to the Facility Site are the Mereand Solar Project and the Jefferson – Lewis BOCES Solar Project located outside of Watertown, New York. These projects are located approximately eight miles southeast of the Study Area (Solar Energy Industries Association [SEIA], 2020).

There are two proposed solar energy projects within the Facility Study Area. The Convergent Energy + Power Project is proposed to consist of four five-MW ground mounted solar energy systems with battery storage, and one three-MW solar array ground mounted solar energy system with battery storage. All five proposed solar energy systems will be constructed on a 236.5-acre parcel currently zoned as Business Residential (BR) in the Village of Chaumont. The proposed project will be located off Morris Tract Road in Chaumont, New York adjacent to the

western boundary of the Facility Site. The Tracy Solar Energy Center is a 119-MW alternating current (AC) photovoltaic (PV) solar energy generation facility, proposed by EDF Renewables Development, Inc., which may include approximately 20 MW (80 megawatt hours [MWh]) of energy storage, in the Towns of Orleans and Clayton, Jefferson County, New York. The known proposed land use is located approximately five miles northeast of the Facility Site.

(6) Active Agricultural Businesses, Facilities, and/or Infrastructure

The Jefferson County Agricultural and Farmland Protection Plan was adapted on April 5, 2016. This version of the Plan was updated and improved upon based on efforts made in order to reach goals that had been previously identified in the 2002 version of the Plan. When the Plan was developed in 2002, Jefferson County performed a farmer and agri-business input survey where they received 43 responses from constituents of the county. Of these 43 responses there were 7 farms identified in Ellisburg; 5 in Cape Vincent; 4 each in Clayton and LeRoy; 3 each in Adams and Rodman; 2 each in Alexandria, Brownville, Henderson, Orleans, Philadelphia, and the Town of Watertown; and 1 each in Champion, Hounsfield, and Pamela. There were no responses from the Towns of Lyme, Lorraine, Rutland, Wilna, Worth, Theresa, Antwerp, or the City of Watertown. Therefore, a total of 41 farming and agri-business operations were identified of which 9 are located within towns within the Study Area. Additionally, according to the 2012 Census of Agriculture detailed in the Jefferson County Agricultural and Farmland Protection Plan there are 290,811 acres of farmland within Jefferson County.

Based on the results of the Agricultural Viability Landowner Survey which is discussed in further detail below in Section 15(b), there was one farming operation identified where the responder indicated they currently use their parcel to grow hay which feeds their cows at a farm in Cape Vincent. Additionally, there are two farming operation within the Facility Study Area, including the Northrop Farms located approximately four miles northeast of the Facility Site, and the Massey Ranch located approximately five miles east of the Facility Site. There are no anticipated impacts for either of the operations identified above as a result of the Facility construction. Active agriculture within the Study Area can be viewed on Figure 15-1 and Figure 11-1.

(7) Potential Construction Impacts and Methods to Facilitate Farming

The Applicant has worked with participating landowners to site Facility components in order to minimize impacts and allow for continued agricultural use on land adjacent to the Facility Site. The Facility will be constructed in accordance with the NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands”, dated October of 2019, which is discussed further below in Section 15(c). During the construction and operational life of the Facility 1,012 acres of land within the Facility fence line will be taken out of agricultural production and will be utilized for solar energy components. However, following the decommissioning of the Facility the land can be restored to its agricultural use. While in operation, the Facility will utilize agricultural land for solar energy production. This will ensure that parcels remain intact during the life of the Facility, rather than being sold or subdivided for other purposes that may not allow the land to be reverted to agricultural use. The Facility will allow for continued agricultural use on parcels excluded from the Facility and will protect the viable agricultural land being utilized by the Facility for future use following decommissioning at the end of the Facility’s useful life.

The solar panels for the Facility will be selected primarily for efficiency and effectiveness to harness the maximum amount of solar power at any given time (with consideration to limiting factors including shading, cloud cover, etc.), which concurrently minimizes the amount of land required for generation. While the solar panel arrays are sited on agricultural lands within the Facility Site, the proposed solar panels will be mounted on racking systems supported by driven posts and result in minimal ground disturbance since no excavation will be required for their installation. Where grading and excavation is proposed, topsoil will be stripped, stockpiled, and returned to reduce impacts during decommissioning of the Facility.

The Facility contributes to environmental sustainability of farms through harnessing solar energy within the Facility Site and providing renewable energy to the surrounding communities. Concurrently, the Facility will contribute to climate change mitigation by providing utilities clean energy for distribution and consequently reducing the need for other fossil fuel technology operation to meet energy demands.

(8) Temporary and Permanent Impacts on Agricultural Resources

Approximately 627 acres of disturbance to farmland land is anticipated to occur within the Facility's proposed limit of disturbance (LOD). Facility components that will result in temporary disturbance to farmland include laydown yards, collection tranches, horizontal directional drilling (HDD) pits, and construction entrances. Of these 627 acres, approximately 189 acres will be permanently impacted by grading, haul roads, fencing, gravel areas, inverters, culverts, and riprap. The remaining 389 acres will be impacted by the conversion of the farmland to solar generation use through tree and vegetation clearing. Additionally, within the Facility Site, approximately 299 acres (25.6 percent) of agricultural soils are classified as NYS Agriculture Land Classification's Mineral Soil Groups (MSG) 1-4. Of the 299 acres of soil within the Facility Site that are classified in MSG 1-4, 14.84 acres will be temporarily impacted, 92.32 acres will be permanently impacted, and 192.11 acres will be converted to solar generation rather than agricultural use for the life of the project. To the maximum extent practicable, the Applicant has sited Facility components to minimize impacts to agricultural lands within the Facility Site.

It is important to note that not all of the agricultural land within the fence line will be physically disturbed. For example, areas under panels are not disturbed. Although not physically disturbed, this area will result in the conversion of agricultural land to solar generation during the life of the Project, resulting in approximately 389 acres of conversion. The solar panels will cover approximately 158 acres of agricultural land (including portions of which are MSG 1-4); only 1.13 acres of permanent ground disturbance for the installation of mounting posts will occur on these lands. Ground disturbance for the life of the Facility will be limited to the installation of posts for the racking systems, footings for equipment in the collection substation, and construction of haul roads. The Facility will not impede adjacent agricultural land uses. The useful economic life of the Facility is estimated to be a minimum of 25 years and as detailed in the Site Decommissioning and Restoration Plan (Appendix 23-1), the Applicant will return lands within the Facility Site to their original condition through reseeding and careful mobilization of equipment. As such, agricultural land sited within the Facility Site will be able to return to its pre-construction use following decommissioning of the Facility.

15(b) Agricultural Resource Maps

In order to help better identify agricultural resources and agricultural structures within the Facility Site, an Agricultural Viability Landowner Survey was distributed via mail to landowners of tax

parcels within the Facility Site. The survey was designed to gain landowner insight and feedback into agricultural use, agricultural production, development restrictions, and drainage systems within the Facility Site. A copy of the survey, as well as the responses have been included in Appendix 15-2. Results of the survey are discussed further in the sections below. Of the eight surveys that were distributed, one response was received.

Within the Study Area, historic aerial imagery from 2018, 2017, 2016, 2013, 2011, 2009, 2008, 2006, 2005, 2003, 1994, and 1985 depicts agricultural uses within open areas dating back to at least the mid-1980s. Agricultural areas mostly consist of corn and hay fields. The Study Area was classified through review of the most recent National Land Cover Database (NLCD) (NLCD, 2016), aerial photography, and onsite observations during field visits conducted in June, September, and December of 2020. Active agriculture within the Study Area can be viewed on Figure 15-1 and Figure 11-1.

(1) Agricultural Land Use

Within the Facility Site there are 1,012 acres of land categorized as New York State Office of Real Property Tax Services (NYSORPTS) agricultural land which can be seen on Figure 3-3. In order to further analyze this land use, a portion of the Agricultural Viability Landowner Survey asked landowners to discuss the current uses of their land and any agricultural uses currently in place and how these agricultural uses serve the community. They were also asked to describe the history of the land over the last three to five years, specifically in relation to agricultural uses. The one response received indicated that the landowners parcel has been used to produce hay for the last five years.

In addition to the survey mentioned above, the Applicant contacted landowners within the Facility Site to discuss the agricultural uses of their property, details of which have been provide below in Table 15-2.

Table 15-2. Agricultural Use by Parcel within the Facility Site

Parcel ID	Acreage of Parcel	Acreage for Facility Site Use	Description of Agricultural Use in Recent Years
62.00-2-15.1	156	125	Hay used for compost.
62.00-1-63	204	50	Has not been farmed for 30+ years.

Table 15-2. Agricultural Use by Parcel within the Facility Site

Parcel ID	Acreage of Parcel	Acreage for Facility Site Use	Description of Agricultural Use in Recent Years
62.00-2-13.22 and 62.00-2-12	323	323	236 acres are used for corn, soybeans, and hay.
62.00-1-7.31 and 62.00-1-7.32	122	40	Not used for agricultural purposes.
62.00-2-23.35	72	72	Used for hay.
62.00-1-61.1 and 62.00-2-11	146	146	134 acres for hay; 12 acres for oats and wheat. Replacement land has already been purchased.
62.00-1-62.1	155	145	Used for hay.
62.00-2-36.4	153	0	This parcel will remain in hay and will not be utilized for Facility components. This parcel will be used for mitigation purposes only.

(2) Production Acreage Retained for Agricultural Use

In addition to questions about agricultural use, the Agricultural Viability Landowner Survey asked landowners to discuss how they intended to continue agricultural use on land not being utilized by the Facility. The survey also asked landowners to indicate if they would purchase or rent additional land to offset land being taken out of production for the construction of the Facility. The one response received indicated that landowner has already purchased an additional 120 acres of land outside of the Facility Site in order to continue their hay farming operations.

As previously discussed, 1,012 acres of agricultural land exist within the Facility Site. Of the 1,012 acres of agriculture lands, approximately 1,007 acres (99.5 percent) will not be permanently impacted from the Facility. However, land within the Facility fence line will be taken out of agricultural production during the life of the Facility, resulting in approximately 389 acres of conversion. This conversion area will be utilized for solar production purposes throughout the useful economic life of the Facility and will therefore not be utilized for agricultural production during that time. Remaining land outside the Facility fenced area will remain under its existing uses, including agricultural production. Additionally, upon decommissioning land previously

utilized for the Facility will be restored to its original use and can be converted back to agricultural use.

(3) Landowner Imposed Development Restrictions

The Applicant has consulted with landowners to identify areas of landowner-imposed development restrictions within the Facility Site. Areas of landowner-imposed development restrictions can be seen on Figure 11-1 of Exhibit 11.

(4) Agricultural Drainage Systems

As part of the Agricultural Viability Landowner Survey, landowners are asked to identify any drainage tile, active irrigation lines, and surface drainage or other unique agricultural facilities on their property. No drainage or irrigation infrastructure was identified by the one survey response received. Drainage ditches within the Facility Site were identified during onsite wetland delineations. Drainage tile, active irrigation lines, and surface drainage or other unique agricultural facilities identified by the Agricultural Viability Landowner Survey can be seen on Figure 15-2. Additionally, further discussion of drainage remediation can be found in Section 15(d) below.

(5) USDA Soil Map

Table 15-3 below identifies the 74 USDA soil map units identified within the Facility Site and the Study Area (USDA, 2018). This table includes the soil texture, percent slopes, acres in the Facility Site and the percentage of the Facility Site and Study Area. Figure 15-3 illustrates the soil map units within the Facility Site and Study Area.

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
AIA	Alton gravelly loam	All Areas Are Prime Farmland	3	0	0.0%	2.0	0.0%
AmA	Amenia loam	All Areas Are Prime Farmland	2	0	0.0%	22.6	0.0%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
AmB	Amenia loam	All Areas Are Prime Farmland	3	0	0.0%	20.5	0.0%
ArC	Arkport fine sandy loam	Farmland of Statewide Importance	5	0	0.0%	3.5	0.0%
Be	Beaches	Not Prime Farmland	9	0	0.0%	2.0	0.0%
BfF	Benson channery silt loam, very rocky	Not Prime Farmland	9	0	0.0%	515.0	0.7%
BgB	Benson-Galoo complex, very rocky	Not Prime Farmland	8	3.3	0.3%	5,558.6	7.0%
BnA	Blasdell channery silt loam	All Areas Are Prime Farmland	2	0	0.0%	5.9	0.0%
BoB	Bombay loam	All Areas Are Prime Farmland	2	0	0.0%	16.6	0.0%
Ca	Canandaigua silt loam	Farmland of Statewide Importance	7	0	0.0%	11.6	0.0%
Cb	Canandaigua mucky silt loam	Not Prime Farmland	7	0	0.0%	22.9	0.0%
CIA	Chaumont silty clay	Farmland of Statewide Importance	6	23.8	2.2%	6,570.9	8.3%
CIB	Chaumont silty clay	Farmland of Statewide Importance	6	12.1	1.1%	3,378.3	4.3%
CmA	Claverack loamy fine sand	All Areas Are Prime Farmland	3	0	0.0%	10.6	0.0%
CmB	Claverack loamy fine san	All Areas Are Prime Farmland	3	0	0.0%	229.6	0.3%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
CnB	Collamer silt loam	All Areas Are Prime Farmland	3	0	0.0%	102.2	0.1%
CnC	Collamer silt loam	Farmland of Statewide Importance	5	0	0.0%	72.8	0.1%
Cp	Covington silty clay	Not Prime Farmland	6	99.0	9.3%	3,235.1	4.1%
DcB	Danley silt loam	All Areas Are Prime Farmland	3	0	0.0%	5.1	0.0%
EIA	Elmridge fine sandy loam	All Areas Are Prime Farmland	2	0	0.0%	228.5	0.3%
EIB	Elmridge fine sandy loam	All Areas Are Prime Farmland	3	0	0.0%	555.2	0.7%
FaB	Farmington loam	Farmland of Statewide Importance	6	2.5	0.2%	3,768.0	4.8%
Fu	Fluvaquents-Udifluvents complex, frequently flooded	Not Prime Farmland	9	5.1	0.5%	868.8	1.1%
GaA	Galen fine sandy loam	All Areas Are Prime Farmland	2	0	0.0%	23.2	0.0%
GaB	Galen fine sandy loam	All Areas Are Prime Farmland	3	0	0.0%	24.5	0.0%
GbB	Galoo-rock outcrop complex	Not Prime Farmland	8	54.7	5.1%	12,319.1	15.6%
GIA	Galway silt loam	All Areas Are Prime Farmland	2	0	0.0%	574.7	0.7%
GIB	Galway silt loam	All Areas Are Prime Farmland	3	0	0.0%	606.8	0.8%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
GIC	Galway silt loam	Not Prime Farmland	5	0	0.0%	81.0	0.1%
GmC	Galway very stony silt loam	Not Prime Farmland	8	0	0.0%	358.9	0.5%
GtB	Groton gravelly loam	Farmland of Statewide Importance	4	0	0.0%	35.1	0.0%
GuB	Groton variant gravelly loam	Farmland of Statewide Importance	3	0	0.0%	256.6	0.3%
Gv	Guffin clay	Farmland of Statewide Importance	7	29.5	2.8%	3,742.9	4.7%
Hb	Halsey mucky loam	Not Prime Farmland	8	0	0.0%	21.8	0.0%
HnB	Hinckley gravelly sandy loam	Farmland of Statewide Importance	6	0	0.0%	2.8	0.0%
HuB	Hudson silt loam	All Areas Are Prime Farmland	3	0	0.0%	766.0	1.0%
HuC	Hudson silt loam	Farmland of Statewide Importance	6	0	0.0%	239.6	0.3%
HyE3	Hudson and Vergennes soils,	Not Prime Farmland	8	0	0.0%	574.5	0.7%
KgA	Kingsbury silty clay	Farmland of Statewide Importance	5	257.8	24.2%	5,537.4	7.0%
KgB	Kingsbury silty clay	Farmland of Statewide Importance	5	27.3	2.6%	1,294.9	1.6%
Lc	Livingston mucky silty clay	Not Prime Farmland	8	41.8	3.9%	1,342.5	1.7%
Ld	Livingston silty clay loam, frequently flooded	Not Prime Farmland	8	0	0.0%	325.1	0.4%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
Ma	Madalin silt loam	Farmland of Statewide Importance	7	0	0.0%	194.7	0.2%
Mv	Minoa fine sandy loam	Prime Farmland If Drained	5	0	0.0%	16.5	0.0%
NIB	Nellis loam	All Areas Are Prime Farmland	2	0	0.0%	27.8	0.0%
NIC	Nellis loam	Farmland of Statewide Importance	5	0	0.0%	17.7	0.0%
NID	Nellis loam	Not Prime Farmland	6	0	0.0%	2.3	0.0%
Nn	Newstead silt loam	Prime Farmland If Drained	6	0	0.0%	1,114.6	1.4%
NoA	Niagara silt loam	Prime Farmland If Drained	4	0	0.0%	270.5	0.3%
NoB	Niagara silt loam	Prime Farmland If Drained	4	0	0.0%	54.7	0.1%
Pa	Palms muck	Not Prime Farmland	6	0	0.0%	30.2	0.0%
PhA	Phelps gravelly loam	All Areas Are Prime Farmland	2	0	0.0%	18.1	0.0%
PhB	Phelps gravelly loam	All Areas Are Prime Farmland	2	0	0.0%	13.3	0.0%
Pm	Pits, quarry	Not Prime Farmland	9	0	0.0%	58.1	0.1%
Pn	Pits, sand and gravel	Not Prime Farmland	9	0	0.0%	23.6	0.0%
RhA	Rhinebeck silt loam	Prime Farmland If Drained	5	0	0.0%	995.6	1.3%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
RhB	Rhinebeck silt loam	Prime Farmland If Drained	5	0	0.0%	256.6	0.3%
Rn	Rhinebeck variant silty clayloam	Prime Farmland If Drained	5	0	0.0%	278.3	0.4%
Sa	Saprists and Aquepts, ponded	Not Prime Farmland	10	0	0.0%	565.8	0.7%
Sh	Shaker fine sandy loam	Prime Farmland If Drained	5	0	0.0%	195.9	0.2%
Su	Sun silt loam	Farmland of Statewide Importance	7	0	0.0%	2.1	0.0%
Sv	Sun very stony silt loam	Not Prime Farmland	8	0	0.0%	7.1	0.0%
Te	Teel silt loam	All Areas Are Prime Farmland	2	0	0.0%	21.8	0.0%
Ua	Udorthents, refuse substratum	Not Prime Farmland	9	0	0.0%	13.8	0.0%
Ub	Udorthents, smoothed	Not Prime Farmland	9	0	0.0%	126.1	0.2%
VeB	Vergennes silty clay loam	Farmland of Statewide Importance	4	378.9	35.5%	5,253.8	6.6%
VeC	Vergennes silty clay loam	Farmland of Statewide Importance	6	0	0.0%	397.2	0.5%
W	Water	Not Prime Farmland	-	0	0.0%	1,729.0	2.2%
We	Wayland silt loam	Not Prime Farmland	8	0	0.0%	2.0	0.0%
Wh	Whately fine sandy loam	Not Prime Farmland	8	0	0.0%	23.7	0.0%

Table 15-3. Mapped Soils within the Facility Site and Study Area

Map Unit Symbol	Map Unit Name	Farmland Classification	Mineral Soil Group	Acres in Facility Site	Percent of Facility Site	Acres in Study Area	Percent of Study Area
WmB	Williamson silt loam	All Areas Are Prime Farmland	4	0	0.0%	140.7	0.2%
WnB	Wilpoint silty clay loam	Farmland of Statewide Importance	5	106.4	10.0%	4,953.4	6.3%
WnC	Wilpoint silty clay loam	Farmland of Statewide Importance	6	24.7	2.3%	286.2	0.4%
WoB	Windsor loamy fine sand	Farmland of Statewide Importance	5	0	0.0%	28.9	0.0%

(6) NYS Agricultural Land Classification Mineral Soil Group Map

The NYS Agricultural Land Classification System has identified ten MSG based on productivity and capability. Groups 1-4 are considered to represent the most productive farmland within the State and are primarily used for the production of food and fiber, whereas MSG 5-10 are considered to have limitations for agricultural production (NYSAGM 2020).

Within the Facility Site there are approximately 366 acres classified as MSG 1-4. This accounts for 31.3% of the approximately 1,168-acre Facility Site. The construction of the proposed Facility will result in approximately 287 acres of temporary disturbance and approximately 4.7 acres of permanent disturbance associated with the placement of haul roads, inverter equipment pads, and the substation to MSG 1-4. The proposed permanent disturbance (4.7 acres) accounts for 1.3% of soils within the Facility Site classified as MSG 1-4. This is less than 10 percent of the soils within the Facility Site classified as MSG 1-4 which is in line with NYSAGM goals to limit the conversion of agricultural areas by solar development (NYSAGM 2020). Temporarily disturbed soils will be restored in accordance with the NYSAGM Guidelines. Additionally, there will be no disturbance to areas classified as Prime Farmland by the USDA Natural Resources Conservation Service (NRCS) within the Facility's LOD.

Even though there will only be 4.7 acres of permanent disturbance to MSG 1-4 within the Facility Site, there will be 389 acres of land conversion within the Facility site. Land within the

Facility fence line will be taken out of agricultural production during the life of the Facility and will be utilized for solar production resulting in a conversion of land use within the Facility Site. This conversion area will be utilized for solar production purposes throughout the useful economic life of the Facility and will therefore not be utilized for agricultural production during that time. Remaining land outside the Facility fenced area will remain under its existing uses, including agricultural production. As previously stated, upon decommissioning land previously utilized for the Facility will be restored to its original use and can be converted back to agricultural use.

Based on publicly available spatial data MSG 1-4 within the Facility Site can also be viewed on Figure 15-3. There is currently no publicly available spatial data for MSG 5-10 and therefore this data has not been provided on Figure 15-3. However, information regarding MSGs 1-10 and associated acreage within the Facility Site has been provided in a tabular format in Table 15-3 above.

15(c) Agricultural Plan

The Applicant will comply with the NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands”, dated October of 2019, to the maximum extent practicable for requirements specific to restoration, monitoring, and decommissioning which are further discussed in Agricultural Plan included as Appendix 15-3. As stated in the NYSAGM guidelines, an Environmental Monitor (EM) will coordinate with the NYSAGM, Division of Land and Water Resources, to develop an inspection schedule and solution if any such goal included in the guidelines cannot be met. Additionally, in consultation with the New York State Department of Public Service (NYSDPS), the EM will conduct regular site inspections of the construction site and issue regular reporting and compliance audits on these activities.

15(d) Drainage Remediation Plan

A Drainage Remediation Plan has been developed to address inadvertent damages to surface and sub-surface drainage as a results of Facility construction. The Plan will also discuss the likelihood of impacts, as well as anticipated repair methods. The Plan is available in Appendix 15-4 of this Exhibit.

(1) Likelihood of Drainage Impacts Within and Adjacent to the Facility

As previously discussed the Applicant will work with landowners within and adjacent to the Facility Site to identify drainage infrastructure prior to construction. Drainage features within the Facility Site were identified through onsite wetland delineations. There were no drainage features identified as a result of the Agricultural Viability Landowner Survey discussed in previous sections of this Exhibit. The Applicant is committed to working with landowners/farm operators in order to minimize impacts to agricultural operations and address unanticipated post-construction impacts. The Applicant does not anticipate any permanent impacts to surface or subsurface drainage as a result of construction through the use of proper siting of Facility components to avoid areas of landowner-imposed development restrictions and sensitive site resources. However, in the event that impacts to surface or subsurface drainage occur during construction of the facility, components that are damaged will be identified with flags or stakes until evaluation of damage and permanent repairs are completed.

Prior to construction the Applicant will hire an independent, third-party EM to oversee all construction and restoration activities in order to oversee compliance with all applicable environmental commitments and siting permit requirements. Prior to the commencement of Facility related construction, an overall site survey will be performed in order to effectively locate and demarcate the exact location of Facility components and routes. Additionally, the EM, with the support of construction management personnel, will conduct specific site reviews at locations to be impacted, or potentially impacted, by associated construction activities. Pre-construction site review will direct attention to previously identified sensitive resources to avoid (e.g., select wetlands and waterbodies, archaeological, or agricultural resources), as well as the limits of clearing, location of drainage features (e.g., culverts, ditches), location of existing underground pipelines and utilities, known locations of agricultural tile lines, and layout of erosion and sediment control measures. Work area limits will be defined prior to construction using flagging, staking, and/or fencing.

The Applicant is committed to working with landowners/farm operators in order to minimize impacts to agricultural operations and address unanticipated post-construction impacts. Additionally, the Applicant will utilize best management practices (BMPs), including utilizing trench breakers in areas of moderate to steep slopes on active agricultural land where drainage issues have been identified if deemed necessary to ensure that the deposition of impacted or stockpiled soils does not occur over agricultural lands.

(2) Anticipated Repair Methods

Existing drain tiles will be identified and located before construction as much as is reasonably possible based primarily on the results of the Agricultural Viability Landowner Survey previously discussed, and consultation between the Applicant and landowners. During and after construction operations, any existing drain tiles within the LOD will be checked for damage. Any drain tiles damaged by the construction will be replaced or repaired consistent with the NYSAGM's details for "Repair of Severed Tile Line" to the maximum extent practicable. The Applicant will coordinate with the landowner to continue to monitor drain tiles post-construction to ensure that repairs are properly functioning.

15(e) Feasibility of Agricultural Co-utilization

While there will be no agricultural activities within the Facility's fence line, agricultural activities outside the fence line and on adjacent parcels can continue as there will be no offsite staging and/or storage used for the construction of the Facility. The Applicant worked with its participating landowners to identify development restrictions and specific properties that should be preserved to allow for continued agricultural use and development. This allows the landowner to continue existing agricultural operations where necessary. The land outside the Facility LOD remains available to landowners for agricultural use and development. The Facility has also been sited and designed to prioritize the placement of Facility components of parcels with contiguous proximity to one another. This reduces the need to place components, such as collection lines and haul roads, offsite. This also limits the number of haul roads required for the Facility, allowing multiple parcels to be accessed via one road instead of several. Designing the Facility in the manner helps to condense and reduce permanent impacts to land, as well as reduce interference with existing adjacent land uses, such as agricultural production.

As previously stated, agricultural land within the fence line will be restored in accordance with the NYSAGM Guidelines. Additional information regarding site restoration and decommissioning can be found in Exhibit 23.

Conclusions

Roughly 35 percent of the Facility Site is agricultural land. Approximately 31.3% of the Facility Site is classified as MSG 1-4. The Facility Site is located entirely within Jefferson County

Agricultural District 2. The proposed solar panels will result in minimal ground disturbance, protecting the viable agricultural land for future use following decommissioning of the Facility. During operation, continued agricultural use is allowed for on parcels excluded from the Facility. The one response received from the Agricultural Viability Landowner Survey indicated that the landowner produced hay for the last 5 years, but that they have purchased 120 acres of land outside of the Facility Site to continue their hay farming operations. The Facility will be constructed in accordance with the NYSAGM guidance document “Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands” as well as the Applicant’s Drainage Remediation Plan and Agricultural Plan. The Facility has been designed to comply with 19 New York Codes, Rules and Regulations (NYCRR) § 900-2.16 and the Uniform Standards and Conditions (USCs) and impacts related to agricultural resources have been avoided and minimized to the maximum extent practicable.

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