



NORTH SIDE ENERGY CENTER

Case No.: 17-F-0598

1001.4 Exhibit 4

Land Use

Contents

Exhibit 4: Land Use.....	1
4(a) Existing Land Use.....	2
(1) Land Use Classification Codes.....	2
4(b) Existing Utility Facilities Map.....	6
4(c) Tax Parcel Map	7
4(d) Existing and Proposed Zoning Districts	7
4(e) Adopted Comprehensive Plans	15
4(f) Publicly Known Proposed Land Uses	18
4(g) Map of Agricultural Districts, Current Agricultural Use, Flood Prone Zones, and Designated Recreational and Sensitive Areas	19
4(h) Map of Recreational and Other Sensitive Land Uses Potentially Impacted by the Project.....	19
4(i) Qualitative Assessment of Project Compatibility with Existing, Proposed, and Allowed Land Uses and Local and Regional Land Use Plans	23
4(j) Qualitative Assessment of Project Compatibility with Existing, Potential and Proposed Land Uses of Above-Ground Interconnections and Related Facilities.....	26
4(k) Qualitative Assessment of Project Compatibility with Existing, Potential, and Proposed Land Uses of Underground Interconnections and Related Facilities	26
4(l) Conformance with Coastal Zone Management	27
4(m) Aerial Photographs of All Properties	27
4(n) Aerial Photograph Overlays	27
4(o) Aerial Photograph Information	27
4(p) Community Character of the Study Area	27
4(q) Photographic Representation of the Project Area	31
4(r) Project Area Farmland Classification Mapping	31
4(s) Farmland Classification within Limits of Disturbance	32
4(t) Publicly Known Proposed Land Use Map	32

4(u) Agricultural Impacts and Agricultural Development Plan.....	33
4(v) Description of Avoidance and Minimization of Impacts to Natural Resources and Prime Farmland.....	35
References	40

Tables

Table 4-1. Project Facility Impacts to Agricultural Districts and Prime Farmland	3
Table 4-2. Land Use Classification Codes within the Study Area	6
Table 4-3. Recreational and Other Sensitive Land Uses within the Study Area	20
Table 4-4. Impacts to Land Use Types.....	23
Table 4-5. Agricultural Classification of Soils within the Project Area	37

Figures

Figure 4-1. Existing Land Use	
Figure 4-2. Existing Utility Locations	
Figure 4-3. Tax Parcels	
Figure 4-4. Zoning Map	
Figure 4-5. Specially Designated Areas	
Figure 4-6. Agricultural Use within the Study Area	
Figure 4-7. Recreational and Other Sensitive Land Uses	
Figure 4-8. Aerial Photography of the Study Area	
Figure 4-9. Farmland Classifications of the Project Area	

Exhibit 4: Land Use

This Exhibit will track the requirements of Stipulation 4, dated February 10, 2021, and therefore the requirements of 16 New York Codes, Rules, and Regulations (NYCRR) § 1001.4.

The Project has been sited to avoid and/or minimize potential impacts to land uses within the Study Area and Project Area to the maximum extent practicable as detailed in this Exhibit. The Project Components have been sited to focus development on previously cleared and disturbed land that has historically been utilized for logging and agricultural purposes. Of the overall 2,241-acre Project Area assessed, only approximately 35 percent (781.5 acres) will be used for Project Components within a fenced area of 980.7 acres to generate 180 MW of renewable energy (Section 4(a)). Remaining land outside of the Project's fenced area will remain under its existing uses. Additionally, although the Project is sited within mapped Agricultural Districts, the Project Area will only occupy 0.19 percent of all lands designated as Agricultural Districts within St. Lawrence County. Of the 121 acres of soil within the Project Area that are classified in mineral soil groups 1-4, only one percent (1.4 acres) will be permanently impacted and therefore the Project is consistent with the NYSAGM position to limit conversion of soils classified in these mineral soil groups. Finally, of the 1,100 acres of total limits of disturbance proposed, approximately 82 acres will occur on land classified as Prime Farmland which is only 0.5 percent of all Prime Farmland within the Towns of Massena, Brasher, and Norfolk and 0.06 percent of the Prime Farmland St. Lawrence County (Table 4-1 and Sections 4(r) and 4(w)). Further, of those 82 acres, only approximately 15 acres will be permanently disturbed by racking support poles, access roads, collection (substation, switchyard, inverter pads), and stormwater management structures (filtration basins, rip rap). The remainder will be restored after construction.

The Project proposes to install tracking racking systems. As the technology is rapidly evolving for solar panel technology, and market conditions at the time that procurement decisions need to be made are unknown at this time, the Applicant is proposing in this Application to evaluate both types of racking systems, with the final decision to be made and detailed in the Compliance Filing. The tracking and fixed array racking systems to be utilized would be similar to the Gamechange Solar Genius Tracker™ and the Gamechange Maxspan™ Pile Driven System, respectively, specification sheets of which have been included as Appendix 2-1. Regardless of the type of array racking system ultimately selected for the Project, the Applicant intends to utilize a solar module similar to the Jinko Solar Eagle 72HM G2 380-400 Watt Mono Perc Diamond Cell. A specification sheet for this module has been included as Appendix 2-1. Only selected elements of the Project

would change based upon the selection of array racking system type used, but all changes would be within the component fence line and to the same land uses shown in the Proposed Layout. The location of interior access roads and inverters, depending upon the final locations, could differ from that shown in the Exhibit 11 plans. Land coverage ratios will also be adjusted but are not expected to be substantially or significantly different. There will not be significant adverse environmental impacts if one system is selected over the other.

Accordingly, the drawings, plan and maps presented in Exhibit 11 depict the use of tracking racking systems. As part of the alternative layout evaluation, Exhibit 9 presents further discussion of utilizing all fixed panels.

4(a) Existing Land Use

Figure 4-1 has been prepared using available GIS data from St. Lawrence County, NYS Office of Information Technology Services GIS Program Office, and classification codes of the New York State Office of Real Property Services (NYSORPS) within the Study Area (2-mile radius from the Project Area boundaries). The “St. Lawrence County Parcel Data” data set, derived from the Property Class attribute was used to produce Figure 4-3. The Study Area includes approximately 26,500 acres of land (inclusive of the 2,241-acre Project Area). Land Use Classification Codes have been applied by the County to each parcel within the County to describe its primary use. These Land Use Classification Code descriptions and application are consistent throughout NYS.

(1) Land Use Classification Codes

Land Use Classification Code Categories developed by the New York State Office of Real Property Services (NYSORPS) that occur within the Study Area include Agricultural, Commercial, Community Services, Industrial, Public Services, Recreation and Entertainment, Residential, Vacant Land, and Wild, Forested, or Conservation Lands and Public Parks. Land Use Classification Codes describe the primary use of each parcel and are consistent throughout New York State. Each land use classification that occurs within the Study Area is described below and shown on Figure 4-1.

Agricultural – 100

The NYSORPS describes agricultural land as property used for the production of crops or livestock. Approximately 4,612 acres within the Study Area are classified as Agricultural Land (Code 100). The New York State Department of Agriculture and Markets (NYSAGM) further classifies lands that are certified as Agricultural Districts pursuant to the New York

Agricultural Districts Law (Article 25-AA of the Agriculture and Markets Law). Approximately 613,047 acres of land are mapped as Agricultural Districts within St. Lawrence County, including 1186.2 acres in the Towns of Massena, Brasher, and Norfolk (NYSAGM, 2020).

The Project Area was evaluated to determine impacts to Agricultural Land, including mapped Agricultural Districts, as part of the Project. The Project Area consists of a total of six parcels (805 acres) of NYSORPS-classified Agricultural Land (Code 100), of which five are enrolled in Agricultural District 2 of St. Lawrence County. The Project will have a fenced-in area of 980.7 acres, including the collection substation and switchyard, proposed within the mapped Agricultural Districts. Although the Project is sited within mapped Agricultural Districts, the Facility will only occupy 0.12 percent (745.03 acres) of all lands designated as mapped Agricultural Districts within St. Lawrence County. Furthermore, the Facility’s fenced area will only occupy 7.01 percent (644.4 acres) within the Towns of Brasher; 0.01 percent (0.5 acres) within the Town of Norfolk; and 1.09 percent (100.1 acres) within the Town of Massena of all lands designated as Agricultural Districts. Finally, of the 1,100 acres of total limits of disturbance (temporary and permanent) proposed, only 82 acres will occur on land classified as Prime Farmland which is only 0.5 percent of all Prime Farmland within the Towns of Massena, Brasher, and Norfolk and 0.06 of the Prime Farmland within St. Lawrence County. Table 4-1 includes the temporary and permanent impacts to soil and demonstrates that the Project will result in minimal impacts to agricultural land.

Table 4-1. Project Facility Impacts to Agricultural Districts and Prime Farmland

County	Agricultural District	Temporary Soil Impact	Permanent Soil Impacts (not being restored)	Percentage of Permanent Impact on Prime Farmland Within County
St. Lawrence	District 2 (STLA002)	785.02 acres	8.49 acres	0.001%

Currently, agricultural land within the Project Area can be broken down into hay (alfalfa and non-alfalfa), soybeans, corn crops, oats, alfalfa, fallow/idle cropland, and grassland/pasture as shown on Figure 4-6. Acreages of these crops may differ from year to year as farmers often rotate their crops and other uses could occur in the future.

The construction and operation of solar facilities are typically located within designated Agricultural Districts in NYS. As these facilities have minimal soil impacts on the land being continually disturbed and developed, landowners have the opportunity to restore the land to its agricultural potential following decommissioning. Refer to sections 4(r) through 4(z) below for additional information regarding potential impacts to agricultural land.

Residential – 200

The NYSORPS describes residential land as property used for human habitation. Living accommodations such as hotels, motels, and apartments are included in the commercial category (400). The NYSORPS classifies approximately 8,663 acres of the Study Area as Residential Land (Code 200), including 805 acres within the Project Area. There are four parcels within the Project Area classified as residential land, which consist of one family residential properties (Code 210), rural residences with acreage (Code 240), and mobile homes (Code 270).

Vacant Land – 300

The NYSORPS describes vacant land as property that is not in use, is in temporary use, or lacks permanent improvement. Approximately 8,490 acres of the Study Area are classified as Vacant Land (Code 300). There are 12 properties classified as Vacant Land within the Project Area totaling 1,043 acres (Figure 4-1). Ten of the properties are vacant fields over ten acres (Code 314); one property is abandoned agricultural land (Code 321); one property is classified as other rural vacant land (Code 323); and one property is residential land not utilized for living, but which has a small improvement area (Code 312). Within the Project Area, there are two parcels classified as Vacant Land currently enrolled in Agricultural District 2 in St. Lawrence County.

Commercial - 400

The NYSORPS describes commercial land as property used for the sale of goods and/or services. There are 359 parcels (comprising approximately 785.19 acres) classified as Commercial Land Use (Code 400) properties located within the Study Area in St. Lawrence County. There are no properties classified as Commercial Land Use within the Project Area. Commercial Land Use within the Study Area is primarily located within the more developed areas near the Village of Massena. Impacts to these areas are not anticipated as the Project avoids these Commercial Land Use designated areas.

Recreation & Entertainment - 500

The NYSORPS describes recreation & entertainment as property used by groups for recreation, amusement, or entertainment. There are nine Recreation & Entertainment Land Use (Code 500) properties within the Study Area of the Project. These properties comprise approximately 55.24 acres of the Study Area. There are no Recreation & Entertainment properties located within the Project Area.

Community Services – 600

The NYSORPS describes community service land as property used for the well-being of the community. There are 62 Community Service Land Use (Code 600) properties within the Study Area of the Project. These properties comprise approximately 246.04 acres of the Study Area. There are no Community Service Land Use properties located within the Project Area. The closest commercial properties are located north of the Project Area within the Village of Massena.

Industrial – 700

The NYSORPS describes industrial land as property used for the production and fabrication of durable and nondurable man-made goods. There are 15 Industrial Land Use parcels comprising approximately 28.70 acres within the Study Area. There are no Industrial Land Use parcels within the Project Area. The closest Industrial Land Use is the Massena Springs neighborhood, which is located approximately 0.7 mile northwest of the Project Area. Those parcels are owned by Seaway Timber Harvesting, Inc., Pfeiffer Real Estate Holdings, Marimac US, Inc., St. Lawrence Hostels Inc., Skywater-Massena LLC, and the St. Lawrence County IDA. Current tenants include the R.E. Michel Company, New York Power Tools, Fockler Industries, Op-Tech Environmental Services, and Curran Renewable Energy. No impacts to these or other Industrial Land Uses will result from the Project.

Public Services – 800

The NYSORPS describes public services land as property used to provide services. There are 26 parcels (1070.62 acres) of Public Services Land (Code 800) within the Study Area and no Public Services Land (Code 800) properties located within the Project Area. However, multiple Public Services land use parcels are located adjacent to the Project Site.

Wild, Forested, or Conservation Lands and Public Parks – 900

The NYSORPS describes Wild, Forested, Conservation Lands, and Public Parks as reforested lands, preserves, and private hunting and fishing clubs. There are 24 Wild, Forested, or Conservation Lands and Public Parks (Code 900) properties within the Study Area totaling 1,201.09 acres, and none within the Project Area. These parcels are part of Brasher State Forest, Raquette River, the Grasse River, and the St. Regis River. The closest is located approximately 640 feet north of the Project Area.

Table 4-2. Land Use Classification Codes within the Study Area

Land Use Classification Code	Acreage within Study Area	Percentage of Study Area (%)
Agricultural (100)	4,612.66	17.4
Residential (200)	8,663.20	32.7
Vacant Land (300)	8,490.53	32.0
Commercial (400)	786.00	3.0
Recreation and Entertainment (500)	55.28	0.2
Community Services (600)	246.20	0.9
Industrial (700)	28.71	0.1
Public Services (800)	1,074.28	4.1
Wild, Forested, Conservation Lands and Public Parks (900)	1,218.73	4.6
Roads/Non-Parcel Areas	1,342.04	5.1

Land code data was obtained from NY GIS Clearing House county centroid point data and joined with Digital map parcel polygon data.

4(b) Existing Utility Facilities Map

Figure 4-2 illustrates known existing major electric, gas, and telecommunications facilities within the 2-mile Study Area. As illustrated within the figure, two electric transmission lines cross through the northern portion of the Project Area which are both owned by the New York Power Authority

(NYPA). Utility facilities surrounding the Project Area include additional electric transmission lines, a natural gas pipeline, multiple microwave service towers, and multiple electric substations which are further described in Exhibit 21.

4(c) Tax Parcel Map

Information on the current land use, tax parcel number, and owner of record for each property, and any publicly known proposed land use plans for any of these parcels within the Project Area, as well as those adjacent parcels within 2,500 feet is depicted on Figure 4-3. This information is based on data obtained from St. Lawrence County and field observations of vacant land, where possible. As previously stated, the 1,043 acres classified as vacant land within the Project Area are designated as vacant fields over ten acres (Code 314); abandoned agricultural land (Code 321); other rural vacant land (Code 323); residential land not utilized for living, with a small improvement area (Code 312). Publicly known proposed land uses within the Study Area are further discussed in Section 4(f) and therefore have not been included in Figure 4-3.

4(d) Existing and Proposed Zoning Districts

The Project Area is located within the Towns of Massena, Brasher and Norfolk. A scaled map of the existing zoning districts within each of these towns is included as Figure 4-4. The Study Area includes the Town of Massena, Town of Brasher, Town of Norfolk, Town of Louisville, and Village of Massena in St. Lawrence County. There are currently no proposed zoning districts in any of these municipalities. A description of the zoning districts within the Study Area is presented below, including permitted and prohibited uses within each zone.

Town of Massena

The Town of Massena Zoning Ordinance, dated May 20, 2009, established five districts and one overlay district. The districts include One-Family Residence (R-1), Residential-Agricultural (R-A), Neighborhood Commercial (N-C), Highway Commercial (H-C), General Industrial (I), and Waterfront Revitalization District Overlay (WRD). The Project Area is within the R-A District and the Study Area consists of the following districts: R-A, N-C, R-1, H-C, I, and WRD. The permitted uses for each district are listed below. Uses that are not listed for a zoning district are prohibited from that district.

The R-1 District is intended to recognize and protect the integrity of areas suitable for single-family houses of conventional construction or appearance. Permitted uses include one family dwellings

and accessory uses on the same lot and not intended for gain, such as private garages, sheds and barns, swimming pools and satellite dishes. Uses requiring site plan approval include places of worship, private schools or similar uses; nursing and rest homes; membership clubs, including golf clubs, fraternal and veterans' organizations and the like; cemeteries; home occupations; and permanent signs of any type.

The R-A District is intended to recognize and protect the integrity of areas of the Town which are suitable for a variety of residential types and rural livelihoods. Major solar systems are allowed by special permit. Additional permitted uses include R-1 District permitted uses; two-family dwellings; farm operations: seven acres required; and hobby farm (three to five acres required). Uses requiring site plan approval include R-1 District uses requiring site plan approval; manufactured homes and manufactured home parks; multiple dwellings and conversions of existing dwellings to multiple dwellings; nurseries and commercial greenhouses, nonagricultural keeping of livestock, fowl, or fur-bearing animals; commercial kennels, veterinary clinics and animal hospitals; railroads, airports and utilities and radio and television stations and their related transmission antennas, towers, and other facilities; campgrounds and other recreation facilities; motels; restaurants; boardinghouses or rooming houses; and small rural businesses. Additional criteria are required for small rural business applicants and are outlined in the Zoning Ordinance.

The N-C Neighborhood Commercial District is intended to provide a limited form of hamlet development in areas of the Town located some distance from the Village of Massena. Hamlet development encompasses both residential and related commercial uses. Permitted uses include R-A District uses requiring a standard permit. Uses requiring site plan approval include R-1 District uses requiring site plan approval; multiple dwellings and the conversion of existing dwelling to multiple dwellings; motels, restaurants and bars; retail stores, business offices and services of any type, but no larger than 1,000 square feet of retail sales area of 500 square feet of customer service area; automobile sales, rental, repair and service, including retail gasoline sales and body shop; recreation and entertainment facilities, but no larger than 1,000 square feet of public area; and billboards. The Project Area is not within this District.

The H-C Highway Commercial District is intended to provide for a controlled commercial development of areas which have access to State Highway 37 via existing roads. Land uses in the H-C District are especially those oriented to the highway and not to the Neighborhood Commercial Districts and of the commercial core of the Village of Massena. There are no uses permitted by right in this district. Uses requiring site plan approval include automobile, truck, and

recreational vehicle sales and services, including body and paint work, gasoline sales and dismantlers, light industry (manufacturing or assembly); motels and hotels; nursing homes; recreation and entertainment facilities larger than 1,000 square feet; restaurants and bars; retail stores, office buildings, and services larger than 1,000 square feet of customer service area; veterinary clinics and kennels; billboards; churches; private clubs; nurseries; commercial greenhouses; storage and warehousing; and research and development. The Project Area is not within this District.

The I General Industrial District is intended to provide for areas in the Town which industrial, manufacturing or other materials handling, processing and/or storage activities may take place with maximum economic and environmental feasibility and with minimum impact on residential, agricultural and commercial development. There are no uses permitted by right in this district. Uses requiring site plan approval include manufacturing, assembling, converting, altering, finishing, cleaning, recycling, or any other processing and incidental storage of products and materials; wholesaling, storage and warehousing; junkyards and dismantlers; research laboratories; truck and rail terminals and port facilities, including docking, fueling, loading and unloading; signs; waste storage and/or treatment facilities; and adult uses.

The WRD Overlay District, partially overlays other districts defined above, is designed to ensure that uses undertaken in the Waterfront Revitalization District are consistent with policy established in the Local Waterfront Planning Program. The Planning Board shall apply special standards outlined in § 207-22 of the Zoning Ordinance to all uses that are permitted by right or permitted with site plan approval in order to insure consistency of the proposed use with policy adopted under the Local Waterfront Revitalization Program. The Project Area is not within this District.

Town of Brasher

The Town of Brasher Zoning Regulations, adopted September 16, 2020, established 5 zoning districts. The districts include Rural District (R), Hamlet District (H), Rural Place District (RP), Planned Development District (PD), and Resource Conservation District (RC). The Project Area is within R and RC Districts, and the Study Area also consists of the R and RC Districts. Portions of both the Project Area and Study Area are within a Flood Hazard Overlay as well. The permitted uses for each district are listed below. Uses that are not listed for a zoning district are prohibited from that district.

The R District is identified as viable for continued agricultural and low density rural residential and outdoor recreational use and is classified as such because of soil type and susceptibility to seasonal high groundwater and is generally beyond the urbanized areas. Large-scale solar systems are allowed by special permit. Additional permitted uses within the R District include agriculture; one-and two-family dwellings, including modular homes and camps; mobile home, and mobile home as an accessory use, subject to provision in Article V, Section 29 of the Zoning regulations; and accessory structure or uses.

The H District was created to provide for more intensive residential and commercial uses where municipal services are available, or on soils suitable for such intensive use. Permitted uses in the H District include one-and two-family dwellings, including modular homes, double wide trailers on permanent foundations; and accessory structures or uses. The Project Area is not within this District.

The RP District was created to recognize and guide the development of the small places which have developed as mainly residential areas. There has not historically been a mix of uses in such places and this district encourages low density housing and allows for basic services. Permitted uses in the RP District include one-and two-family dwellings, including modular homes, mobile homes; and accessory structures and uses. The Project Area is not within this District.

The PD District's purpose is to provide for new residential, commercial, or industrial development in which economies of scale or creative architectural or planning concepts may be utilized by the development without departing from the spirit and intent of the Zoning Regulations. The Planning Board shall review any application for this district. The Project Area is not within this District.

The RC District's purpose is to protect special or unique resources; to promote the use of scenic resources for the pleasure and welfare of the public; and to safeguard people and property damage due to natural causes such as flooding. This district includes wetlands regulated by the NYSDEC and flood hazard areas as designated by Local Law No. 1 of 1987. Absent Article 10, such areas may be permitted by public agencies. No development is proposed within the RC District for the Project.

Town of Norfolk

The Code of the Town of Norfolk, adopted 2012, established multiple zoning districts and one overlay zone. The districts include Commercial-Business (C-B), Commercial-Highway (C-H),

Commercial-Industrial (C-I), Planned Development (P-D), Residential-Hamlet (R-H), Residential-Agricultural (R-A), and Land-Conservation (L-C). The Project Area is within the Commercial-Highway (C-H), and Residential-Agricultural (R-A) zones. The Study Area consists of the following additional zones: Planned Development (P-D), Residential-Hamlet (R-H), and Land-Conservation (L-C). The permitted uses for each zone are listed below. Uses that are not listed for a zoning area are prohibited from that zone.

The C-B District delineates areas appropriate for retail commercial and business activity and reserves them for this use. Permitted uses in the C-B District include banks and post offices; business offices and professional offices; hotels and motels; laundrettes; public buildings and uses; retail stores and personal service shops; taverns and restaurants; and accessory buildings and uses. Special uses permitted upon authorization of the Town Planning Board include one- and two-family dwellings; three- and four-family dwellings; day-care centers; public utility structures, and public uses. The Project Area is not within this District.

The C-H District delineates areas appropriate for general commercial activity, especially those oriented to the highway and automobile traffic, and reserves them for this use. Major solar systems are allowed by special permit. Additional permitted uses in the C-H District include uses permitted in the C-B District; commercial storage, warehousing, and trucking operations; and the sale and servicing of automobiles, farm implements, mobile/manufactured homes, and recreational vehicles. Special uses permitted upon authorization of the Town Planning Board include uses specially permitted in the C-B District; auto washes; commercial recreation; day-care centers; drive-in/drive-through restaurants; gasoline stations and public garages; and public utility structures and uses.

The C-I District delineates those areas appropriate for heavy commercial and light industrial uses and reserves them for these uses. Permitted uses in the C-H District include uses permitted in the C-H District; fabrication and assembly plants; highway garages and equipment storage; the sale of building supplies and materials; and the sale of feed and farm supplies. Special uses permitted upon authorization of the Town Planning Board include uses specially permitted in C-H Districts; commercial excavation and processing; day-care centers; junkyards; and public utility structures and uses. The Project Area is not within this District.

The P-D District provides a means of developing those land areas within the community considered appropriate for new residential, recreational, commercial or industrial use, or a

satisfactory combination of these uses, in an economic and compatible manner, while encouraging the utilization of innovative planning and design concepts or techniques in these areas without departing from the spirit and intent of the Town Code. Permitted uses for the P-D District are not detailed further within the Town Code. The Project Area is not within this District.

The R-H District delineates those areas where predominantly single-family residential development has occurred or is likely to occur in accordance with the Town Plan and maintains residential areas by requiring lot and building standards which reflect existing conditions and service potential. Permitted uses in the R-H District include one- and two-family dwellings; Class A mobile/manufactured homes; existing farms; public buildings and uses; public parks, playgrounds and golf courses; schools and churches; service organizations, clubs, and lodges; and accessory buildings and uses. Special uses permitted upon authorization of the Town Planning Board include three- and four-family dwellings; day-care centers; funeral homes; home occupations; and public utility structures or uses.

The R-A District delineates those areas of the Town that are appropriate for agricultural and open space purposes and for low-density residential uses and preserves the integrity of such areas for these purposes. Major solar systems are allowed by special permit. Additional permitted uses in the R-A District include farms; one- and two-family dwellings; Class A and B mobile/manufactured homes; public buildings and uses; public parks, playgrounds and golf courses; schools, churches, and cemeteries; and accessory buildings and uses. Special uses permitted upon authorization of the Town Planning Board include animal hospitals, kennels, and stables; commercial excavation/mining; commercial recreation; day-care centers; fish and game clubs; home occupations; junkyards and sanitary landfills; lagoons and disposal areas; livestock holding areas; Public utility structures and uses; roadside stands and temporary sales; the sale and servicing of farm implements; small residential businesses; and three- and four-family dwellings.

The L-C Overlay District recognizes and places additional safeguards on certain areas of the Town that are more prone to flooding and water pollution than are other areas of the Town. This District includes a 200-foot buffer around the shoreline of certain streams and waterways at normal water level, as well as additional areas depicted on the Zoning Map. The Project Area is not within this District.

Towns Outside the Project Area but Within the Study Area

Town of Louisville

The Town of Louisville Zoning Regulations, adopted January 25, 1972 and most recently updated December 2013, established eight districts including Residential (R-1), Residential-Agricultural (R-A), Resort-Residential (R-R), Community Center (C-C), General Commercial (G-C), Scenic Preservation (S-P), Public Lands and Water (P-LW), and Planned Development (P-D). The Project Area does not overlap with the Town of Louisville. However, the Study Area overlaps with the R-1, R-A, C-G, and the S-P Districts. The permitted uses for each district are listed below. Uses that are not listed for a zoning district are prohibited from that district.

The R-1 District is an area where predominately single-family residential development has occurred. The permitted uses in R-1 District include one family dwelling, class A manufactured home and modular home and/or guest house; two family dwelling; public or parochial school; public or municipal building; church, parish house, cemetery; public park, playground or golf course; and accessory building or use.

The R-A District includes areas of the Town which are appropriate for agricultural and open space purposes and for low-density residential uses and to preserve the integrity of such areas for those purposes. Permitted uses in the R-A District include farm, riding stable, holding area, roadside stand as part of a farm operation; one family dwelling, class A manufactured homes, modular home and/or a guest home; two family dwelling; public or parochial school; church, parish house, cemetery; public park, playground or golf course; public or municipal buildings or use; private club or lodge; mobile home and class B manufactured home; and accessory building or use.

The G-C District's purpose is to delineate areas appropriate for general commerce activity and to reserve them for this use. Permitted uses include retail, wholesale store, personal service shop; restaurant, tavern; auto, farm implement, mobile home, recreational vehicle sales and services; business machines, office equipment, home furnishings; dairy or ice cream plant; building or electrical supply, hardware; heating, plumbing, air conditioning or similar shops; outdoor theatre; and accessory building or use.

The S-P District's purpose is to enhance community appearance; to promote the use of scenic resources for the pleasure and welfare of the citizens of, and visitors to, the Town; and to safeguard against damage due to natural causes such as flooding and water pollution. This district

includes the area 200 feet on either side of the shoreline. No permanent buildings are permitted within 75 feet of the shoreline except for a single-story service or water-related building. Uses permitted under the Planned Development Process within the remaining 125 feet of the S-P District include trail or easement – pedestrian, equestrian, snowmobile; waterfront development – beach, boating, picnicking; scenic overlook, vista or clearing; camps; one-family dwellings, class A manufactured home and modular units only; private lodge or club; bed and breakfast; and accessory building or use.

Village of Massena

The Village of Massena Zoning Regulation, adopted January 1, 1998, established eight districts including Residential A District (R-A), Residential B (R-B), Residential C (R-C), Central Business District (CBD), Commercial Transition District (CTD), Commercial Auto-Related District (CAR), Planned Development District (PDD), and Greenbelt Preservation District (G-PD). The Project Area does not overlap with the Village of Massena. However, the Study Area overlaps with the R-A, R-B, R-C, CTD, CAR, GPD, PID (Planned Industrial District, a subset of PDD) Districts. The permitted uses for each district are listed below. Uses that are not listed for a zoning district are prohibited from that district.

The R-A District was created to maintain and to protect the integrity of single-family residential areas and compatible public uses by requiring lot and building standards and prohibiting the intermixture of single-family dwellings with incompatible uses. Permitted uses in the R-A District include one-family dwellings and municipally owned parks and/or recreational areas.

The intent of the R-B and R-C District is to maintain and protect the integrity of residential areas designed to accommodate a mixture of single- and two-family structures and compatible public uses by requiring lot and building standards and prohibiting the intermixture of single- and two-family dwellings with incompatible uses. Permitted uses in both districts include one-family dwellings; two-family dwellings; and municipally owned parks and/or recreational areas.

The CTD District was created to recognize and provide for transition districts commonly located between a commercial core and its outlying vehicular-oriented satellite commercial districts. Land uses are typically a mixture of business, commercial and high-density residential activities. Site plan review is necessary in order to assure a measure of consistency and compatibility of use and design and to minimize adverse effects on traffic flow on the major thoroughfares leading to the Central Business District. Principal uses after site plan review include bed-and-breakfast; bus

terminals; business offices; convenience services; convenience stores; funeral home (undertaker), gasoline stations, health care facility; hotel; motel; newspaper/publishing; professional offices; radio-television studios; residential uses; restaurants; retail services; retail stores; rooming houses; social/fraternal organizations; day-care centers; and banks.

The CAR District includes land uses that commonly depend upon the motoring public and which typically require larger land areas and more off-street parking than would be economical in the Village center. Principal uses after site plan review include animal hospital; auto parts sales and installation; bed-and-breakfast/tourist home; car wash; convenience services; convenience stores; gasoline stations, health care facilities; hotels; laundry and dry-cleaning establishments and plants; motels; motor vehicle sales; motor vehicle repair shops, including body shops; professional buildings; rental/leasing of cars and trucks; retail store complexes (exceeding 5,000 square feet floor space); restaurants; truck terminals; warehousing and storage; day-care centers; and banks.

The purpose of PDD is to provide a means of developing land areas within the community considered appropriate for residential, recreational, commercial or industrial use or a combination of these uses in a compatible and economical manner by a single developer while ensuring the public health, safety, welfare, comfort and convenience of the public in general and of the occupants of the immediate neighborhood to the maximum extent possible. The PID District is limited to the following specified purposes after site plan review, any combination of industry (assembly and/or manufacturing) and warehousing, and any permitted use in the Planned Commercial District. Those uses include entertainment/amusements; professional buildings and area of Massena Memorial Hospital land; restaurants; and retail stores.

The GPD District is intended to protect special and/or unique natural areas of the Village, including both public and private lands. Site Plan review is required for all uses in this district. Permitted uses include parking; outdoor recreation, including but not limited to temporary seasonal nonpermanent docks, playgrounds and parks, picnic areas, tennis courts, walkways, ballparks, and fishing access areas.

4(e) Adopted Comprehensive Plans

The Project Area is proposed within the Towns of Massena, Brasher, and Norfolk in St. Lawrence County. In coordination with planning officials in the Town of Brasher, the Applicant has determined that there is currently no comprehensive plan available for the Town of Brasher.

Planning officials from the Towns of Massena and Norfolk have identified The Town of Massena Comprehensive Plan and the Town of Norfolk Strategic Plan as documents being utilized for planning purposes within each respective town. These two plans are currently not publicly available. As such, the Applicant has requested that each town provide a hard copy of the plans to be included in this exhibit, however copies of these plans have not yet been received. A discussion of the Project's consistency with the St. Lawrence County Public Policy Guide is included below.

Town of Massena Comprehensive Plan

The Town of Massena Comprehensive Plan was written in 1988 primarily to address the issues brought on by an ice storm in 1990. The Comprehensive Plan is currently under review and revision in an effort to include a more comprehensive discussion of the Town's priorities and goals. As stated above, the Applicant has requested a hard copy of the Plan but has not yet received a response. Therefore, a discussion regarding the Project's consistency with the Town of Massena Comprehensive Plan has not been included in this exhibit.

Town of Norfolk Strategic Plan

The Town of Norfolk Strategic Plan is currently not publicly available on the Town's website. As stated above, the Applicant has requested a hard copy of the Plan but has not yet received a response. Therefore, a discussion regarding the Project's consistency with the Town of Norfolk Strategic Plan has not been included in this exhibit.

The St. Lawrence County Public Policy Guide

The St. Lawrence County Public Policy Guide was originally adopted in 1995 and modified in 2011. In the plan, the St. Lawrence County Board of Legislators identifies multiple guiding statements that aim to improve the decision-making process in St. Lawrence County. The plan is divided into nine sections which each address a different topic or area of local concern. These sections include agriculture, community character, economic development, environment and natural resources, government effectiveness, health care, housing, human services, and transportation and infrastructure. A copy of the plan is available online at <https://www.stlawco.org/Departments/Planning/Publications>. The Project is consistent with the following guidelines identified in the Public Policy Guide:

Economic Development

- ED-1. St. Lawrence County recognizes the value of a diverse economic base, which includes small businesses, industrial production, agriculture, forest products, mining, services, back office, retail, education, tourism and other sectors.
- ED-4. St. Lawrence County will continue to participate actively in efforts to coordinate local and regional economic development efforts and to act as a source of information on economic development programs and opportunities.
- ED-9. Natural resources, including agricultural lands, forests, clean water and open space are significant economic resources.
- ED-11. St. Lawrence County should encourage small-scale resource use by individuals and businesses in order to develop and diversify the local economy, for example, through buying local firewood, agricultural production such as vegetables, and sources of alternative energy.

Environment and Natural Resources

- EN-2. Economic development and environmental protection are essential for St. Lawrence County's future. Decision makers will work to find solutions which support both; when this is not possible, a reasonable balance must be found.
- EN-3. Project design and siting decisions will maximize environmental compatibility by using the following stepwise process:
 - Identify sensitive environmental areas or conditions and the risks involved with development;
 - Promote development which preserves sensitive areas and avoids risks; and
 - Consider all alternatives, but if not possible to avoid development in high risk areas, design the project with the least possible environmental impacts.
- EN-4. In permitting situations where a balance between environmental protection and development must be achieved by decision makers (such as planning and zoning board members), decision makers should consider the following factors:
 - Whether the development will cause an acceptable change in the character, or will be a detriment to neighboring land uses, or to the environment in general, or over the long term;
 - Whether the benefit sought by the developer can be achieved in a feasible way that preserves environmental quality; and

- Whether the developer should be required to set aside funds to remediate the property once the land use has ceased.
- EN-20. The use of energy resources that have the least environmental impact is promoted.

Transportation and Infrastructure

- TI-14. The County supports energy conservation and the development and use of renewable energy resources.

The Project will be consistent with these guiding statements by helping to stabilize or even enhance the local economy through payments that are provided to the participating landowners. Lease payments for land used to support the Project help parcels remain intact during the life of the Project, rather than being sold or subdivided for other purposes, such as industrial park or residential subdivision development which would permanently preclude agricultural operations on the land. The decommissioning requirements of the Siting Board under Article 10 will ensure that agricultural land where the Project will be sited will be preserved for future use. The Project will diversify the County’s economic base and it will provide a source of renewable energy while avoiding significant adverse impacts to sensitive aspects of the natural environment. The Project design will take into consideration the balance between the regional economy, the natural environment, and the need for increased sources of renewable energy in St. Lawrence County, as well as New York State as a whole.

4(f) Publicly Known Proposed Land Uses

The Applicant has consulted with local planning officials of towns located within the 2 mile Study Area, including the Town of Massena, the Village of Massena, the Town of Louisville, the Town of Norfolk, and the Town of Brasher to determine publicly known, proposed land uses within the Study Area. Based on conversations with each town listed above, the Applicant has determined that there are currently no publicly known, proposed land uses within the Study Area. Therefore, publicly known proposed land uses have not been included or referenced on a figure within this exhibit.

As previously stated in Section 4(d), the Village of Massena is currently zoned to include a Planned Development District (PDD). The area within the Village that is zoned as PDD does fall within the 2-mile Study Area. However, this zoning district will not be impacted by the Project. The PDD zoning district can be viewed on Figure 4-4.

4(g) Map of Agricultural Districts, Current Agricultural Use, Flood Prone Zones, and Designated Recreational and Sensitive Areas

Areas of special designation such as agricultural districts, flood prone zones, and recreational/sensitive areas are depicted on Figure 4-5 and current agricultural use is depicted on Figure 4-6. Figure 4-5 was prepared using data from the NYS Department of Agriculture and Markets, NYS Department of State, NCED, FEMA, and USGS Protected Areas Database Base Map: NYS Office of Information Technology Services, GIS Program Office, 2020. Figure 4-6 was prepared using data from the USDA National Agricultural Statistics Service (2019). Two designated inland waterways, the Raquette River and the Grasse River, are located within the Study Area. They are located 0.12 and 1.70 miles north of the Project Area, respectively. The Great Lakes Coastal Boundary is located within the Study Area, 1.58 miles north of the Project Area. There are no local waterfront revitalization program areas, State Environmental Quality Review Act (SEQRA) designated critical environmental areas, or groundwater management zones within the Study Area of the Project.

The Project Area is located in St. Lawrence County Agricultural District 2 (STLA002). Seven parcels that are within the Project Area are currently enrolled, including five parcels classified as Agricultural Land and two parcels classified as Vacant Land. Agricultural District 2 in St. Lawrence County was created in 1974 and was last certified in February 2015. Additional discussion of agricultural land is included in Exhibit 22.

4(h) Map of Recreational and Other Sensitive Land Uses Potentially Impacted by the Project

Figure 4-7 includes recreation and other land uses reviewed within the Study Area that, theoretically, might be affected by the sight, sound, or odor of the construction or operation of the Project, or the on-site interconnection and related facilities. Table 4-3 identifies the sources used to populate Figure 4-7, as well as whether or not those land use types were identified within the Study Area. None are located within the Project Area.

Table 4-3. Recreational and Other Sensitive Land Uses within the Study Area

Land Use	Sources Reviewed	Within Study Area?
Wild, Scenic and Recreational River Corridors	NYSDEC List of Wild, Scenic and Recreational Rivers (Accessed 2020) National Wild and Scenic Rivers Mapping (Accessed 2020)	Yes
Open Space	NYS Department of State, Office of Planning & Development GIS Database (Accessed 2020) NYSDEC GIS Database (Accessed 2020)	Yes
Known Archaeological, Geologic, Historic, or Scenic Area	NYS Historic Preservation Office (SHPO) Cultural Resources Information System (CRIS) (Accessed 2020) NYS Department of State, Office of Planning & Development GIS Database (Accessed 2020)	No
Parks	NYSDEC GIS Database (Accessed 2020) NYSDEC State Lands Mapping (Accessed 2020) National Park Service Mapping (Accessed 2020)	Yes
Designated Wilderness, or Forest Preserve Lands	NYSDEC GIS Database (Accessed 2020) National Wilderness Preservation System (Accessed 2020)	Yes
Scenic Vistas	NYS Scenic Vistas (Accessed 2020)	No
Conservation Easement Lands	NYSDEC GIS Database (Accessed 2020) NYS Department of State, Office of Planning & Development GIS Database (Accessed 2020) National Conservation Easement Database (Accessed 2020)	Yes
Designated Scenic Byways	NYS Department of Transportation List of Scenic Byways (Accessed 2020)	Yes
Nature Preserves	NYSDEC GIS Database (Accessed 2020)	No
Designated Trails	NYS OPRHP (Accessed 2020) NYSDEC GIS Database (Accessed 2020)	Yes
Public Access Fishing Areas	NYSDEC GIS Database (Accessed 2020) DECinfo Locator (Accessed 2020)	No

These areas will not be adversely affected by potential Project visibility, odors or sounds during construction or operation of the Project. They are too far away to be adversely affected by Project operational sound or from the temporary odor from a typical construction site. Potential Project visibility to each of the sensitive land uses within the Study Area have been evaluated and avoided to the maximum extent practicable by integrating vegetative plantings for visual screening in areas where the Facility is not otherwise concealed by topography and/or existing vegetation. Scaled maps that show these designated areas, recreational, and other sensitive land uses are evaluated in detail in Exhibit 24 and the Visual Impact Assessment (VIA). The VIA assesses potential visibility of the Project Facilities within 2 miles of the boundaries of the Project Facilities (Study Area), and also within a 5-mile Visual Study Area (VSA). Local, state, and federal sensitive visual resource areas were investigated per 16 NYCRR §1001.24. An inventory of publicly available and accessible visual resources was explored through the acquisition of GIS data, review of town, county, and agency reports, topographic data, and site visits. Visual resources within 5 miles of the Project are listed in Table 24-1 of Exhibit 24.

Within the 2-mile Study Area, there are no nature preserves, scenic vista areas or public fishing access sites. Brasher State Forest, a state park managed by the NYSDEC, is located within 2 miles of the Project Area, approximately 1.1 miles to the southeast. Additionally, according to the NYSDEC, open space simply consists of land or water that is undeveloped (NYSDEC 2020b). This may include private or publicly owned forests, agricultural fields, public parks and preserves (NYSDEC 2020b). As previously stated, Brasher State Forest is located within 2 miles of the Project Area which may all be considered open space. There are three wild, scenic, or recreational rivers located within 2 miles of the Project Area, which include the Grasse River, Raquette River, and St. Regis River (Figure 23-3). Public Parks within the 2-mile Study Area include Bushnell Park, East Orvis State Park, the John Story Walking Path, and Massena Springs Park. There are three total national conservation easements held by the Natural Resources Conservation Service (NRCS) within the 2-mile Study Area including two easements within the Town of Brasher located adjacent to the central Project parcels, and one within the Town of Massena located northeast of the Project Area. The Great Lakes Seaway Trail, a national scenic byway; and the Military Trail, a NYS scenic byway, both occur within the 2-mile Study Area meeting at the junction of State Route 131 and County Route 37. There are two trails located within the Study Area, southeast of the Project Site. They are located within Brasher State Forest and are known as the Munson Trail and the Route 53 Access Trail. They are intended for hiking, cross-country skiing, horse riding, and mountain biking. The nearest snowmobile trail (Trail Code: B75B) is located northeast

of the Project Area adjacent to the Study Area boundary and is maintained by the St. Lawrence County Snowmobile Association. Visibility is not expected at most of the listed Table 24-3 visual receptors. For more information regarding the VIA performed in relation to these resources, see Exhibit 24.

Exhibit 20 includes details of known archaeological and historic resources in the Study Area, as well as the results of the studies performed to evaluate the location and extent of known resources within the Study Area. According to the Phase IA report included with this Application as Appendix 20-1, there are areas of High, Moderate, and Low archaeological sensitivity within the Project Area. As part of the Phase I study, a search of OPRHP records indicated that nine archaeological investigations have been conducted within a one-mile radius of the Project Area, two of which include portions of the current Project Area. No archaeological sites have been previously recorded within a one-mile radius of the Project Area and there are no known cemeteries within the Project Area. Additionally, the OPRHP records confirm there are no NRHP-listed or eligible archaeological sites within the APE for archaeological resources and there is one New York State Museum (NYSM) Archaeological Area located within the Project Area.

TRC completed a Historic Architecture Reconnaissance Survey for the Project, consistent with Section 106 of NHPA and OPRHP *Guidelines*. The Historic Architecture Reconnaissance Survey is included with this Application as Appendix 20-3. The survey report indicated that a total of 56 architectural resources aged 50 years or older were identified within the APE. Please refer to Exhibit 20 and Appendix 20-3 for additional discussion of cultural and historic resources.

The Project Area is located in the Massena Central School District, while the Study Area also overlaps with the Brasher Falls School District and the Norwood-Norfolk School District. There are no schools located in the Project Area. The nearest school is located approximately 1.6 miles northwest of the Project Area boundaries. Additional institutional, community, and municipal uses in the Study Area include primarily churches and a cemetery. There are no expected impacts to these areas aside from potential minimal and temporary traffic from construction.

The Project Facilities will have no impact on recreation resources or other sensitive land uses as identified in Table 3 of Appendix 24-1 and shown on Figures 4-5 and 4-7, respectively. Also, the Applicant does not expect any impacts on major communications and utility uses and infrastructure, as discussed in Exhibit 26 and shown on Figure 4-2.

4(i) Qualitative Assessment of Project Compatibility with Existing, Proposed, and Allowed Land Uses and Local and Regional Land Use Plans

A qualitative assessment was completed for the Project to determine the level of compatibility with existing, proposed, and allowed land uses. The qualitative assessment evaluates short- and long-term effects of Project-generated noise, odor, traffic, and visibility on the use and enjoyment of areas within one mile of Project facilities. This assessment includes evaluation of the compatibility of the Project’s above-ground structures including commercial-scale solar arrays, access roads, inverters, and fencing, as well as any above-ground and below-ground interconnections, with surrounding land uses. The Project Area totals approximately 2,241 acres and the area inside all fences for the Project totals 980.71 acres. Within the 980.71 acres, Project Components will physically occupy approximately 781 acres. The assessment specifically addresses impacts to nearby land uses that may be of particular concern to the community, including agricultural land, residential areas, schools, civic facilities, recreational resources, and commercial areas.

The Town of Massena adopted its Zoning Ordinance on May 20, 2009, with an updated zoning map adopted in 2017. The Town of Brasher adopted its Zoning Regulations on September 16, 2020. The Town of Norfolk adopted its Zoning Regulations on May 9, 1988 which was updated in 2005. Existing land uses have been described in the sections above according to the Towns of Massena, Brasher, and Norfolk’s local regulations, as well as the St. Lawrence County Public Policy Guide and the NYSORPS land use classification codes. Project Facilities are proposed to be located on agricultural, residential, and vacant land according to NYSORPS data for St. Lawrence County

Table 4-4. Impacts to Land Use Types

Land Use Type	Components Facility Area (acres)	Access Roads (acres)	Collection Lines (miles)	Substation (acres)	Switchyard (acres)
Agricultural	457.1	4.9	19.2	0.0	0.0
Residential	19.1	0.2	10.8	0.0	0.0
Vacant	492.7	5.6	21.7	2.2	0.2
Roads	0.0	0.4	2.7	0.0	0.0
Total	968.9	11.1	54.4	2.2	0.2

As shown in Table 4-4 above, Project Components will occupy land classified as Agricultural, Residential, and Vacant Land. As noted in section 4(a) above, Agricultural Land is described as “property used for the production of crops or livestock.” All proposed solar arrays and electric collection lines are located on Agricultural, Vacant, and Residential Land. The collection substation, and POI switchyard facilities are located on Vacant Land. Other Project Components on Agricultural Land include 4.9 acres of the access roads, and 19.2 miles of collection lines. Collection lines sited within Agricultural Land will be located underground. Timber production has historically been conducted within the Project Area, resulting in the creation of cleared areas. The Project was sited within these previously disturbed areas to the maximum extent practicable to reduce the total amount of tree clearing necessary for the development of the Project.

The NYSORPS description of Agricultural Land includes both active and inactive agricultural land. Active and inactive agricultural lands were treated the same in this evaluation, as future land uses could include agricultural practices. A total of 481 acres of Agricultural Land is occupied by the proposed Facility components. The placement of solar arrays on land designated as Agricultural Land is expected as it is one of the primary land use types in the region. However, as described herein, the Project is compatible with continued and future agricultural use of these properties.

Although the solar arrays will occupy a portion of active farmland, this impact on active farmland will be insignificant when considering farmland at both the Town and County levels. The total fenced-in area of Project components to be located on agricultural land (504.44 acres) represents only 11 percent of all land identified as agricultural land by the NYSORPS within the two-mile Study Area (4,605.75 acres). This includes less than one percent of all land identified as agriculture land by NYSORPS within St. Lawrence County (285,108.73 acres).

No offsite staging and/or storage is proposed as part of the Project, further reducing the potential impact to active farmland and forests. This allows for existing land uses on lands adjacent to the Project parcels, including those that are used for agriculture, to continue with limited interruption. Additionally, solar farms typically result in a minimal amount of ground disturbance for the installation of racking and mounting posts, which comprise less than a tenth of an acre, thereby preserving the ability to use the land for agricultural purposes in the future following decommissioning. Overall, of the approximately 82 acres that will occur on land classified as Prime Farmland, only 1.41 acres of permanent soil disturbance is proposed with the remaining approximately 80 acres consisting of temporary soil disturbances that will be restored following

construction. With regard to New York's Clean Energy Standard, the New York Public Service Commission's (NYPSC) highest projection for the amount of utility-scale solar that would need to be installed to help reach the 50% renewables mandate was approximately 6,900 megawatts (MW) (NYPSC 2016, Appendix G at 17, 19). The NYPSC noted that even if 100% of those projects were sited on New York agricultural lands, only about 0.16% of such lands would be converted to utility-scale solar (NYPSC 2016, Appendix G at 20).

A total of 4.9 acres of access roads are proposed on land designated as Agricultural Land by NYSORPS. Access roads will be used to traverse the Project during construction and operation phases. Access road widths have been proposed at the minimum width necessary to provide adequate area for maintenance and emergency vehicle access in order to reduce the amount of permanent land impacts.

The Project is proposed on land designated as Agricultural, Vacant, and Residential Land. The Applicant has worked carefully to design and site the Project to maximize the efficiency of the solar array and ensure they are located the optimal distance from participating and adjacent landowners so they do not pose any adverse effects. Table 31-1 in Exhibit 31 includes the Town's setback requirements and the Applicant's proposed setbacks.

The compatibility of Project components with existing land uses was evaluated based on the NYSORPS and through review of the Town of Massena Zoning Ordinance, the Town of Brasher Zoning Regulations, and the Town of Norfolk Zoning Regulations. All of the solar arrays are located on land classified as Agricultural Land, Vacant Land, and Residential Land.

As indicated above, additional land uses within 1 mile of the Project Area were considered as part of the qualitative assessment including residential areas, schools, civic facilities, recreational facilities, and commercial areas. As part of the assessment, it was determined that the Project Area is located within the Massena Central School District, with portions of the Study Area occurring within the Brasher Falls and Norwood-Norfolk School Districts. Community and municipal uses within 1 mile of the Project Area include primarily schools, churches, and cemeteries. There are no adverse impacts to these areas aside from potential minimal and temporary traffic from construction.

The Applicant has reviewed the St. Lawrence County Agricultural Development Plan. The compatibility with the Agricultural Development Plan is also discussed in Section 4(u). The Project is also in line with the St. Lawrence County Public Policy Guide as discussed in Section 4(e). The

region contains a viable source for solar energy that helps to benefit local economic centers and towns that may have fluctuating revenue from farming operations.

No unusual odors will be generated by the Project Facilities. The construction phase of the Project will generate temporary noise-related impacts mostly in relation to heavy equipment and machinery in the Project Area, typical of any major construction project. Heavy machinery must be used during access road construction, material and component delivery, installation of electrical interconnect components, racking and mounting post construction, and site restoration. Construction noise will be typical of any large commercial construction project. The impacts from construction noise will be minimized by, amongst other measures, operating only during daylight hours and complying with previously adopted Siting Board certificate conditions. Detailed analyses of the noise impacts of the Project can be found in Exhibit 19.

Assessments of stormwater prevention and protection measures and potential glare are provided in Exhibit 23 and Exhibit 24, respectively.

4(j) Qualitative Assessment of Project Compatibility with Existing, Potential and Proposed Land Uses of Above-Ground Interconnections and Related Facilities

The collection lines will be placed underground for the entirety of their length and installed primarily via cable plow and/or direct trenching with some portions to be proposed via horizontal direction drill (HDD) in order to avoid stream and wetland resources. The aboveground interconnection lines proposed consist of two short spans, approximately 151 feet and 122 feet, respectively, from the proposed switchyard to the existing transmission line. Where the installation of the collection lines will be via HDD, the only impacts will be temporary and located at the entry and exit pits of the HDD equipment. Once built, the Project will not have any adverse impacts to existing or proposed land uses. The proposed collection substation and switchyard will be located on Vacant Land. All proposed solar arrays and electric collection lines are located on Agricultural, Vacant, and Residential Land. Due to the limited impacts associated with the Project, construction and operation of the Project will be compatible with the existing, potential, and proposed land uses within the Study Area.

4(k) Qualitative Assessment of Project Compatibility with Existing, Potential, and Proposed Land Uses of Underground Interconnections and Related Facilities

Collection lines from the inverters to the collection substation will be placed underground within the Project Area. Approximately 19.2 miles of collection lines are sited within land designated as

Agricultural Land and 2.7 miles within overlapping roadways. The collection circuits will be underground and will only require temporary impacts to land uses as part of installation. Due to the limited impacts associated with the Project, underground interconnections associated with the Project will be compatible with the existing, potential, and proposed land uses within 300 feet from the centerline of such interconnections or related facilities.

4(l) Conformance with Coastal Zone Management

The Project Area is not within a designated coastal area. Although there are no local waterfront revitalization programs adopted by the Towns within the Study Area, the Raquette River is a designated inland waterway and the Study Area includes a New York State designated coastal area. However, a demonstration of conformance with the Coastal Zone Management Act (CZMA) is not required as the designated inland waterway and coastal area are not within the Project Area.

4(m) Aerial Photographs of All Properties

Figure 4-8 represents aerial photographs of properties within the 2-mile Study area. The Applicant is not aware of any material changes in land use that have occurred since the aerial photographs were taken.

4(n) Aerial Photograph Overlays

Figure 4-8 represents aerial photography overlaid with proposed Project facilities and access roads to show the relationship with existing structures and vegetation cover types. Appendix 11-1 also overlays the proposed Project facilities, access roads, and limits of clearing at a larger scale with additional detail.

4(o) Aerial Photograph Information

Figure 3-1 illustrates aerial photography of all properties within the Study Area with a scale of 1:2,400. This scale provides for detail, discrimination, and identification of natural and cultural features. The figure indicates the photographer and date photographed.

4(p) Community Character of the Study Area

The Project is located near the northern border of New York in a rural area of St. Lawrence County as shown on the figures included in this Exhibit. The Applicant worked with the Towns of Massena, Brasher, and Norfolk, landowners, and stakeholders to identify specific characteristics of the

community that are of particular importance in the region. Land within the Towns of Massena, Brasher, and Norfolk consists of agricultural fields, forested land, utility rights-of-way, residences, farm buildings, streams, wetlands, hedgerows, farm ponds, outbuildings, storage silos, small paved roads, and unimproved farm roads. While the Study Area occupies approximately 26,500 acres, the amount of topical land used for the Project Components is minimal (781.5 acres) in comparison, thus the Project will have little impact on existing land uses in the Study Area. The primary potential effects will be during construction, which are temporary and, as noted above, mitigation measures will be employed to minimize impacts relating primarily to fugitive dust and noise (Exhibits 17, 19 and Appendix 23-3). Current recreational, cultural, and other concurrent uses, such as farming, can continue uninterrupted as usual. Through a review of zoning ordinances, the St. Lawrence County Agricultural Development Plan, and the St. Lawrence County Public Policy Guide, the community character of the area was assessed.

Community character includes defining features and interactions of the natural, social, and built environment, and how those features are used and appreciated in the community, based on the information obtained through PIP Plan activities. The Applicant has taken these three aspects into account and consulted with local municipalities, landowners, and stakeholders to identify specific characteristics of the community that are of particular importance to the region.

The natural environment includes agricultural land, forested land, conservation lands, recreation sites, and water resources in the area. The St. Lawrence Public Policy Guide describes the county's natural environment as diverse, with landscape types ranging between rocky cliffs, rolling hills, mountains and lakes. Approximately 222 acres of forested land will be cleared within the LOD which is approximately 10 percent of the total 2,241-acre Project Area. Timber production has historically been conducted within the Project Site, resulting in the creation of cleared areas. The Project was sited within these previously disturbed areas to the maximum extent practicable to reduce the total amount of tree clearing necessary for the development of the Project. Approximately 504 acres of previously disturbed Agricultural Land will be used for the Project. This land will be used during the economic life of the Project. The land will be restored to substantially its existing condition following decommissioning and will be available to be reclaimed for agricultural use, limiting the impacts to this land type.

The major water resources in the area include the Raquette River, Grasse River, St. Regis River, Saint Lawrence River, and on-site delineated wetlands and streams. Raquette River, Grasse River, St. Regis River, and Saint Lawrence River are located outside of the Project Area and will

not be impacted by Project construction or operation. The delineated wetlands and streams have been avoided to the maximum extent practicable when siting Project Components as discussed in Exhibit 22.

The Saint Lawrence River can also be considered part of the social environment that contributes to the community character of the region as a primary body of water located in a rural area. The North Side Energy Center will not impact the Saint Lawrence River as part of the social or natural environment as it does not impede the use of the river for recreational uses. The Project is sited away from developed areas nearby and cultural resources were considered and protected. The St. Lawrence Public Policy Guide and Agricultural Development Plan both indicate that the cultural and social environment of the region can be described as having rural character. The diverse natural landscapes throughout the area have heavily influenced the community development to include large areas of agriculture and forested land, as well as small scenic hamlets and towns that serve as community centers for commerce and gathering. These developed areas may include restaurants, shops, meeting places, churches, and community centers. There are several restaurants, churches, and stores located within the Study Area. The Project will not impact any of these social aspects as all Project components will be installed within the Project Area boundaries. Some temporary and minimal impacts may result from construction traffic through the Towns of Massena, Brasher, and Norfolk. Refer to Exhibit 25 for an analysis on potential traffic impacts associated with the Project's construction.

Lastly, the nearby built environment includes some of the social buildings described above, commercial areas, public utilities, and residential buildings. As previously stated, the developed and built environment of this region is heavily influenced the surrounding landscape. The community places value on maintaining rural character through careful planning and zoning. The closest commercial area within the Study Area lies approximately 0.7 miles north of the Project Area but will not be impacted aside from the temporary and minimal construction traffic. There are 66 residential parcels located adjacent to the Project Area. The Project has been sited 83 feet away from the nearest non-participating residence. However, in most cases, the Project has been sited several hundred feet away from other non-participating residences, the farthest being 5,263 feet away, to limit impact.

All three of these features, natural, social, and built environments, contribute to the rural community character of the area. The Applicant intends to protect this character through the careful design and siting of the North Side Energy Center.

Per 16 NYCRR § 1000.24(b)(1), the NYSORPS classifications are further divided into Landscape Similarity Zones (LSZs) to categorize the visual character and quality of the landscape. As described in Exhibit 24, LSZs are areas of similar landscape/aesthetic character based on patterns of landform, vegetation, water resources, land use, and user activity. These zones provide additional context for evaluating viewer circumstances and visual experiences. Land cover classification datasets from the 2016 USGS National Land Cover Dataset (NLCD) is available for GIS analysis and was used for an initial establishment of LSZs as they provide distinct and usable landscape categories. These NLCD land cover groupings were then refined based on aerial photo interpretation and general field review. This effort resulted in the definition of five final LSZs within the VSA as depicted in Table 2 and Figure 2, Attachment 2 and include the following:

- Zone 1: Agricultural– This zone includes cultivated land and that which is used for row crops, hay, or pasture.
- Zone 2: Forested – This zone includes mature deciduous and coniferous tree groups.
- Zone 3: Developed – This zone includes villages, towns, cities, rural residential abutting roadways, and transportation corridors.
- Zone 4: Open – This zone includes miscellaneous other open parcels that may have minor development with less visually obstructive features as well as other open lands with few visual obstructions such as minor expanses of barren land, land with short scrub shrub vegetation, and emergent wetlands.
- Zone 5: Open Water – This zone is essentially restricted to the St. Lawrence, Raquette and Grass Rivers in the northern part of the VSA as well as the St. Regis River located southeast of the Project. Other smaller unnamed water bodies, as well as open water of emergent wetlands, are included.

Additional information regarding the LSZs and potential visual impacts of the Project are included in Exhibit 24 (Visual Impacts) and Appendix 24-1 (Visual Impact Assessment).

The Applicant has strived to balance the goals of the State and the Project with the goals of the community, as outlined in the St. Lawrence County Agricultural Development Plan and the St. Lawrence County Public Policy Guide and discussed with local landowners. Exhibit 9 (Alternatives) discusses the reasonable alternative Project layouts that were evaluated as part of this balancing effort. Exhibit 10 details the State laws and programs that set aggressive clean

energy targets to combat climate change by reducing greenhouse gas emissions from the State's energy sector.

Avoidance, minimization, and mitigation measures that were used in Project siting are directly related to the community character of the area. The selected technology of photovoltaic solar arrays will result in an efficient layout minimizing the area of land, to the maximum extent practicable, that is required in order to achieve 180 MW of energy production. The collection lines have been placed underground to decrease aboveground impacts along the public roads. Minimum setbacks of 20 feet from non-participating residences and 20 feet from roadways provide for areas of open space between these features and the proposed solar arrays that help maintain the open space/rural character of the area. A Landscape Plan, included as Appendix 11-1, depicts the vegetative screening that will screen the Project Components to reduce visibility and also help maintain the visible greenery in the landscape that makes up the rural character.

The studies and evaluations that have been prepared as part of this Application are described in further detail in the specific exhibits and associated appendices. Specific exhibits to reference include Exhibit 24 (Visual Impacts), Exhibit 19 (Noise and Vibration), Cultural Resources (Exhibit 20) and Exhibit 22 (Terrestrial Ecology and Wetlands). Each exhibit provides additional information related to how the studies and evaluations were performed and provide details that pertain to the community character of the Study Area, as well as how unavoidable impacts will be mitigated.

4(q) Photographic Representation of the Project Area

Photographic representations of the Project Area and Study Area are included in Appendix 24-1 (Visual Impact Assessment) to depict existing characteristics of the Project and surrounding area setting.

4(r) Project Area Farmland Classification Mapping

A scaled map of the existing farmland classifications (e.g., Prime Farmland, Prime Farmland if Drained, etc.) within the Project Area is included within Figure 4-9. Farmland classifications have been cross referenced with county specific NYS Agricultural Land Classification mineral soils groups and are reported in Table 4-5 in Section 4(y) below. A discussion of how the Project will avoid, minimize, or mitigate impacts to agricultural soils with the NYS Agriculture Land Classification's mineral Soil Groups 1-4 classification and the effects the Project has on use of the land for future farming operations is included in Section 4(v).

4(s) Farmland Classification within Limits of Disturbance

Within the Project Area, the LOD includes approximately 8 percent of land (82 acres) classified as Prime Farmland, 63 percent (698 acres) as Prime Farmland if Drained, 3 percent (34 acres) as Farmland of Statewide Importance, and 26 percent (287 acres) as Not Prime Farmland. A discussion of how the Project will avoid, minimize, or mitigate impacts to agricultural soils with the NYS Agriculture Land Classification's mineral Soil Groups 1-4 classification and the effects the Project has on use of the land for future farming operations is included in Section 4(v).

4(t) Publicly Known Proposed Land Use Map

As previously stated in Section 4(f), there are no publicly known, proposed land uses within the Study Area. The Applicant has determined through interviews with local planning officials that there are currently no publicly known proposed land uses which required permit applications have been filed with the appropriate permitting authority. Therefore, a map containing such information has not been provided in this exhibit. The North Side Energy Center will use previously disturbed agricultural land, or land that has previously been logged only during the useful economic life of the Project and it will be returned to a state that can be farmed after decommissioning. Additional information regarding the Decommissioning Plan can be found in Exhibit 29.

The St. Lawrence County Agricultural Development Plan details information regarding agricultural land within the county based primarily on the 2012 Census of Agriculture which reported on agricultural statistics around New York State between 2002 and 2012. Based on the census data reports, a total of 1,303 farms operated within the county in 2012. Of these 1,303 total farms, 474 farm produced hay and other crops, including maple syrup; 277 were utilized for dairy cattle and milk production; and 255 produced beef cattle. These three categories represented the largest farm types reported in the census as well as 75 percent of farm operations reported in 2021 in St. Lawrence County. However, between the period of 2002 and 2012 there was a loss of 106 dairy farm operations; a loss of 47 cattle feedlots; and an increase of 36 hay and other crop operations. The overall number of farms and acres farmed within the county that was reported have declined by 10 to 12 percent. Additionally, the county experienced an overall decline in farms 50 acres and larger. This is the opposite of what has been experienced statewide where the trend of growing and large-scale farm operations is on the rise, as large-scale farms can produce more food and therefore have more stability (Mulford, 2020). The Agricultural Development Plan identifies rural character as an important aspect to the overall community character within St. Lawrence County. The rural character of this area will remain both during operation and after the useful life of the

Project. During operation, the Project will provide economic revenue for the Towns, County, and School District but will be a passive use in that there will be no traffic resulting from its operation, there will be minimal noise, no emissions, and no increase in demands of municipal infrastructure and services, including water. After the Project's useful life, the land can be restored to essentially its previous condition consisting of open space and agricultural land.

4(u) Agricultural Impacts and Agricultural Development Plan

The St. Lawrence County Agricultural Development Plan, adopted by St. Lawrence County in December 2016, was developed to "help strengthen and diversify its agricultural economy, and to protect and improve farmland". The document summarizes information about the economic profile of the County, the soils and farmland parcels, and input from farmers, in order to develop goals and potential future actions that can be taken to address current issues. A copy of the Plan is available online at:

<https://stlawco.org/sites/default/files/Planning/2016AgDevPlan/SLC%202016%20Ag%20Plan.pdf>.

The Project will not significantly impact St. Lawrence County's ability to uphold the 14 goals identified in the Agricultural Development Plan:

1. Improve the productivity of farmland
2. Protect prime soils for agricultural production
3. Assist with the transition to a new generation of farm operators
4. Improve the productivity and profitability of farm operations and agribusinesses
5. Invest in infrastructure that supports the operations of agricultural businesses
6. Protect and expand the current capacity of value-added production in the county
7. Deliver programs and services that sustain and advance the county's dairy industry
8. Assist dairy and livestock producers with environmental stewardship
9. Deliver education and training to help create a qualified labor pool of farm workers
10. Provide programs and services that promote the expansion of livestock production and increase the average gross sales of livestock producers
11. Deliver programs and services that increase the annual gross sales of local food producers

12. Deliver program and services that advance the county's maple industry
13. Minimize the economic and environmental impact of invasive species on agriculture and forestry, with a particular emphasis on the Emerald Ash Borer (EAB)
14. Provide technical assistance to landowners on achieving a healthy and resilient forest ecosystem and sustainable timber industry

Solar projects such as the North Side Energy Center contribute to environmental sustainability of farms through harnessing solar energy within the Study Area and providing clean energy to surrounding communities. Concurrently, the Project 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. Although the solar panels will cover 504 acres of agricultural land, only approximately 15 acres of permanent ground disturbance will occur as part of this Project. The remaining 489 acres will be restored after construction. Ground disturbance for the Project will be limited to the installation of posts for the racking systems and footings for equipment in the collection substation and POI switchyard and construction of access roads. The useful economic life of the Project is estimated to be at least 30 years and, as detailed in the Decommissioning Plan, the Applicant will return land within the Project Area to substantially its original condition through reseeding and careful mobilization of equipment. As such, agricultural land sited within the Project Area will be able to return to its primary purpose (before Project construction) following decommissioning of the Project.

The North Side Energy Center will not impede adjacent agricultural land uses, including plantings, cattle grazing, bee keeping or maintaining the use of the land for agricultural means. Participating landowners also receive lease payments that are added income that may offset the cost to own the land. If landowners are unable to financially support owning their land, they may be forced to sell it or break it up into smaller parcels. After it is sold, it could potentially be developed for other permitted uses previously described in Section 4(d). These previously described permitted uses which are included in the zoning ordinance would not allow the land to be returned to farming after their intended use or may not have a useful life expectancy. The Project allows the agricultural land to be used for solar energy production, helps keep larger parcels contiguous through lease payments, and protects the viable agricultural land for future use at the end of the Project's useful life. The other permitted uses do not provide this protection.

4(v) Description of Avoidance and Minimization of Impacts to Natural Resources and Prime Farmland

Approximately 504 acres of disturbance to agricultural land is anticipated to occur within the Project's proposed LOD. This includes temporary and permanent disturbance and also includes areas outside of the fence line. The temporary disturbance will be caused by grading and laydown areas. Of the 1,100 acres of proposed disturbance, 81.6 acres will occur on land classified as Prime Farmland which is only 0.54 percent of all Prime Farmland within the Towns of Massena, Brasher, and Norfolk and 0.06 percent of the Prime Farmland within St. Lawrence County. Of these 504 acres, only approximately 15 acres will comprise permanent soil disturbance. The remaining 489 acres will be restored after construction. Additionally, within the Project Area, approximately 121 acres (5 percent) of agricultural soils are classified as NYS Agriculture Land Classification's mineral soil groups 1-4. Of the 121 acres of soil within the Project Area that are classified in mineral soil groups 1-4, only one percent (1.4 acres) will be permanently impacted. The Applicant has made significant efforts to site Project components to minimize impacts to the maximum extent practicable for existing and future use of agricultural lands within the Project Area. The Applicant will also 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 is further discussed in Exhibit 21. As stated in the NYSAGM guidelines, an Environmental Monitor 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, consistent with any applicable Article 10 Certificate Conditions.

The solar panels for the Project 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. The solar technology was selected to avoid concrete foundations and will instead be installed via driven posts. Additionally, monocrystalline solar modules are being considered for the Project as they are one of the most the efficient models available for large scale solar generation facilities in the renewable energy market. While the solar panel arrays are sited on agricultural lands within the Project Area, 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.

Newly proposed access routes will be sited in areas that are not actively used by farmers to the maximum extent practicable. Additionally, the Applicant will make improvements to and maintain the conditions of existing access intended for use during the operational lifetime of the Project. Where grading and excavation is proposed, topsoil will be stripped, stockpiled, and returned to reduce impacts during decommissioning of the Project. Additional discussion on agricultural restoration techniques is included in Exhibit 29(b)(3).

4(w) Parcels Enrolled in the Agricultural District Program

The following Project parcels are located within St. Lawrence County Agricultural District 2: 17.001-1-20.11, 17.001-2-45, 17.001-1-15, 17.001-2-38.1, 10.004-3-48, 10.004-12-2, and 10.004-11-2.11. In coordination with the St. Lawrence County Department of Planning, the enrollment date and current status of the Project Area Parcels were obtained. The above identified Project parcels were last considered enrolled on February 17, 2015 (CUGIR, 2017).

Parcels enrolled in the Agricultural District Program do not have an expiration date but can be revisited every eight years once established. The parcels listed above may be expanded upon or petitioned for removal from the Program by the County Board during the next 8-year review of the district which will be conducted on 2023.

4(x) Project Compatibility with Current Agricultural Uses

As illustrated on Figures 4-1 and 4-6, the Project Site consists of a mix of residential, agricultural, and vacant land. The agricultural land within the Project Site is primarily composed of corn and pastureland. As explained in 4(z), continued agricultural operation outside of the Project fence line, or LOD, is permitted at the discretion of the landowner. However, the Applicant understands that the participating landowners are not proposing to continue agricultural use within the Project fence line.

Timber production has historically been conducted within the Project Site, resulting in the creation of cleared areas. The Project was sited within these previously disturbed areas to the maximum extent practicable to reduce the total amount of tree clearing necessary for the development of the Project.

Impacts to current agricultural uses surrounding the Project Area will be minimized by limiting the number of Project access road entrances from public roads. Upon completion of Project decommissioning, the Project Area will be returned to its substantially pre-construction conditions

and will be made available for agricultural uses once again. See Exhibit 9 for a detailed discussion on design options considered to enable continued agricultural use.

4(y) Classification of Agricultural Land to be Impacted

The NRCS soils survey Farmland Classification was used in combination with the most recent NYS Agricultural Land Classification’s soil group to determine the value of the agricultural lands proposed to be permanently impacted. The agricultural classification of soils within the Project Area are summarized in the Table 4-5 below.

Table 4-5. Agricultural Classification of Soils within the Project Area

Map Unit Symbol	Map Unit Name	NRCS Farmland Classification	NYS Agricultural Land Classification Soil Group	Acres within Project Area
Ak	Adjidaumo silty clay, 0 to 3 percent slopes	Farmland of Statewide Importance	7	2.3
Ao	Adjidaumo silty clay, 0 to 3 percent slopes, frequently flooded	Not Prime Farmland	8	8.8
CvB	Croghan loamy fine sand, 3 to 8 percent slopes	Farmland of Statewide Importance	4	4.4
Dd	Deford loamy fine sand	Farmland of Statewide Importance	8	124.7
Df	Deford mucky loamy fine sand	Not Prime Farmland	8	1.5
EmB	Elmwood fine sandy loam, 3 to 8 percent slopes	All Areas are Prime Farmland	3	14.7
FkB	Flackville loamy fine sand, 3 to 8 percent slopes	All Areas are Prime Farmland	4	1.0
GrB	Grenville loam, 3 to 8 percent slopes	All Areas are Prime Farmland	2	6.4
HnA	Hogansburg loam, 0 to 3 percent slopes	All Areas are Prime Farmland	3	26.2
HnB	Hogansburg loam, 3 to 8 percent slopes	All Areas are Prime Farmland	3	68.5
HrB	Hogansburg and Greenville soils, 0 to 8 percent slopes, very stony	Not Prime Farmland	8	251.0

Map Unit Symbol	Map Unit Name	NRCS Farmland Classification	NYS Agricultural Land Classification Soil Group	Acres within Project Area
MaB	Malone loam, 3 to 8 percent slopes	Prime Farmland if Drained	6	99.7
MbB	Malone loam, 0 to 8 percent slopes, very stony	Not Prime Farmland	8	182.8
Mn	Munuscong mucky fine sandy loam	Not Prime Farmland	8	102.2
MsA	Muskellunge silty clay loam, 0 to 3 percent slopes	Prime Farmland if Drained	5	401.7
MsB	Muskellunge silty clay loam, 3 to 8 percent slopes	Prime Farmland if Drained	5	10.4
Na	Naumburg loamy fine sand	Farmland of Statewide Importance	6	1.6
Pg	Pits, gravel and sand	Not Prime Farmland	9	23.3
Rd	Redwater fine sandy loam	Not Prime Farmland	8	72.9
Sg	Stockholm loamy fine sand	Farmland of Statewide Importance	6	10.9
Sw	Swanton fine sandy loam	Prime Farmland if Drained	6	824.1
Uf	Udorthents, clayey	Not prime farmland	9	0.1
Un	Udorthents, refuse substratum	Not Prime Farmland	9	2.3

Within the Project Area approximately 121 acres (5 percent) of soil are classified as being within mineral soil groups 1-4 and 2,120 acres (95 percent) of soil are classified as being within soil groups 5-10. Soil mineral 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 soil groups 5-10 are considered to have limitations for agricultural production (Mulford 2020). Of the 121 acres of soil within the Project Area that are classified in mineral soil groups 1-4 only one percent (1.4 acres) will be permanently impacted. This is less than 10 percent of the soils within the Project Area classified as mineral soil groups 1-4 which is in line with NYSAGM goals to limit the conversion of agricultural areas by solar development (Mulford 2020).

4(z) Feasibility of Continued Agricultural Use Within the Project Area, Outside of the Fence Line

While there will be no agricultural activities within the Project'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 Project. The land outside the Project Facility fence remains available to landowners for agricultural use and development. As previously stated, agricultural land within the fence line will be restored for farming practices and use following the Project's economic life.

References

Affidavit of Jason Mulford Affirming Testimony. Taken on June 5, 2020, at pg. 7, lines 6-18.

Available at:

[http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=54553&_sm_au_="](http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=54553&_sm_au_=) Accessed December 2020.

Cornell University Geospatial Information Repository (CUGIR) (2017). St. Lawrence County Agricultural Districts (2017). Available at <https://cugir.library.cornell.edu/catalog/cugir-007990> Accessed August 2020.

CUGIR (2017). St. Lawrence County Agricultural Districts (2017). Available at: <https://cugir.library.cornell.edu/catalog/cugir-007990> Accessed August 2020.

National Conservation Easement Database (2020). Available at: <https://www.conservationeasement.us/>. Accessed August 2020.

National Park Service (NPS). National Parks Listed by State: National Parks in New York. Available at: <https://www.nps.gov/carto/app/#!/parks/state/NY> Accessed August 2020.

National Wild and Scenic Rivers System. National Wild and Scenic Rivers Story Map. Available at: <https://www.rivers.gov/> Accessed August 2020.

National Wilderness Preservation System (2020). Available at <https://www.wilderness.org/articles/article/national-wilderness-preservation-system> Accessed August 2020.

NYS AGM (2020). Agricultural Districts Acreage Totals by County <https://data.ny.gov/Economic-Development/Agricultural-Districts-Acreage-Totals-by-County/h2id-x25a/data> . Accessed December 2020.

NYSDEC DECinfo Locator (2020a). Fishing and Trails layers. Available at: <https://gisservices.dec.ny.gov/gis/dil/>. Accessed August 2020.

NYSDEC (2020b). Open Space. Available at: <https://www.dec.ny.gov/lands/317.html>. Accessed December 2020.

NYSDEC. Wild, Scenic and Recreational Rivers. Available at:

<https://www.dec.ny.gov/permits/32739.html> Accessed August 2020.

New York Department of Economic Development (2020). New York Scenic Vistas. Available at:

<https://www.iloveny.com/things-to-do/fall/scenic-vistas/> Accessed August 2020.

New York State Department of State (2019). Geographic Information Gateway. Available at:

<http://opdqig.dos.ny.gov/#/home> Accessed December 2019.

New York State Department of Taxation and Finance (2020). Property Type Classification Codes – Assessors' Manual. Updated September 27, 2019. Available at:

<https://www.tax.ny.gov/research/property/assess/manuals/prclas.htm> Accessed August 2020.

New York State Department of Transportation (n.d.) *Scenic Byways*. Available at:

<https://www.dot.ny.gov/display/programs/scenic-byways/lists> Accessed August 2020.

New York State Historic Preservation Office (2020). Cultural Resources Information System.

Available at: <https://cris.parks.ny.gov/Login.aspx?ReturnUrl=%2f> Accessed August 2020.

New York State Historic Preservation Office (n.d.). *Heritage Areas*. Available at:

<https://parks.ny.gov/historic-preservation/heritage-areas.aspx> Accessed August 2020.

New York State Public Service Commission. 2016. Case 15-E-0302, Order Adopting a Clean Energy Standard. Available at:

<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={44C5D5B8-14C3-4F32-8399-F5487D6D8FE8}> Accessed August 2020.

Profiles of USA Public Schools. (2020). Available at: <https://www.publicschoolreview.com/>

Accessed August 2020.

SchoolMap.org. Public School Districts in St. Lawrence County, New York. Available at:

<http://www.schoolmap.org/County/NY-St.-Lawrence-County/> Accessed August 2020.

St. Lawrence County Board of Legislators (1995). St. Lawrence County Public Policy Guide.

Available at:

<https://www.stlawco.org/sites/default/files/Planning/Policy%20Guide%20Final%20Draft%20Revisions%20June%202011.pdf> Accessed August 2020.

St. Lawrence County Government. St. Lawrence County Public Policy Guide (Adopted 1995,

Modified 2011). Available at: <https://www.stlawco.org/Departments/Planning/Publications>

Accessed August 2020.

St. Lawrence County Planning Office (2016). St. Lawrence County Agricultural Development

Plan. Available at:

<https://www.stlawco.org/sites/default/files/Planning/2016AgDevPlan/SLC%202016%20Ag%20Plan.pdf> Accessed August 2020.

Town of Brasher, St. Lawrence County, New York, Zoning Regulations, February 1993.

Town of Brasher, St. Lawrence County, New York, Solar Energy Facilities Law (Local Law No. 5 of the year 2018), December 2018.

Town of Massena, St. Lawrence County, New York, Massena Code (Chapter 207: Zoning), 2009.

Town of Norfolk, St. Lawrence County, New York, Code of the Town of Norfolk, June 2012.

Town of Norfolk, St. Lawrence County, New York, Local Law to regulate Solar Energy Facilities in the Town (Local Law No. 2 of 2020), July 2020.

United States Department of Agriculture (2020). Natural Resources Conservation Service: Web

Soil Survey. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Accessed August 2020.