



WATKINS GLEN SOLAR ENERGY CENTER

Case No.: 17-F-0595

1001.4 Exhibit 4

Land Use

Contents

Exhibit 4: Land Use	1
4(a) Existing Land Use	1
(1) Land Use Classification Codes	2
4(b) Existing Utility Facilities Map	7
4(c) Tax Parcel Map	7
4(d) Existing and Proposed Zoning Districts	7
4(e) Adopted Comprehensive Plans	10
4(f) Publicly Known Proposed Land Uses	18
4(g) Map of Agricultural Districts, 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	20
4(i) Qualitative Assessment of Project Compatibility with Existing, Proposed, and Allowed Land Uses and Local and Regional Land Use Plans	22
4(j) Qualitative Assessment of Project Compatibility with Existing, Potential and Proposed Land Uses of Above-Ground Interconnections and Related Facilities	24
4(k) Qualitative Assessment of Project Compatibility with Existing, Potential, and Proposed Land Uses of Underground Interconnections and Related Facilities	25
4(l) Conformance with Coastal Zone Management	25
4(m) Aerial Photographs of All Properties	25
4(n) Aerial Photograph Overlays	25
4(o) Aerial Photograph Information	25
4(p) Community Character of the Study Area	26
4(q) Photographic Representation of the Project Area	30
4(r) Erie Canal National Heritage Area Corridor	30
4(s) Project Area Farmland Classification Mapping	30
4(t) Farmland Classification within Limits of Disturbance	30

4(u)	Publicly Known Proposed Land Use Map	31
4(v)	Agricultural Impacts and Farmland Protection Plan	32
4(w)	Description of Avoidance and Minimization of Impacts to Natural Resources and Prime Farmland	35
	References	36

Tables

Table 4-1.	Project 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	22

Figures

Figure 4-1.	Existing Land Uses
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

Appendices

Appendix 4-1.	Town of Dix Comprehensive Plan
Appendix 4-2.	Town of Orange Comprehensive Plan
Appendix 4-3.	Schuyler County Countywide Comprehensive Plan
Appendix 4-4.	Schuyler County Agricultural Development and Farmland Protection Plan and 2008 Update

Exhibit 4: Land Use

This Exhibit will track the requirements of Stipulation 4, dated February 21, 2020, 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 impacts to land uses within the Project Area to the maximum extent practicable as detailed in this Exhibit. Of the overall 771-acre Project Area, only approximately 39 percent will be used for Project Components within a fenced area of approximately 352 acres to generate 50 megawatts (MW) of renewable energy (see Section 4(a)). Additionally, although the Project is sited within a mapped Agricultural District, the Facility will only occupy 0.36% of all lands designated as Agricultural Districts within Schuyler County and 2.83% of all lands designated as Agricultural Districts within the Town of Dix (see Section 4(a)). Finally, within the Project Area, only 2.48% of land to be disturbed by construction and/or operation of the Project is classified as Prime Farmland (see Section 4(v)).

The Project proposes to install solar tracking array racking systems. The tracking array racking systems to be utilized will be similar to the Gamechange Solar Genius Tracker™ System, specification sheets of which have been included as Appendix 2-2. The Applicant intends to utilize a solar module similar to the Jinko Solar Eagle 72HM G2 380-400 Watt Mono Perc Half Cell. A specification sheet for this module has been included as Appendix 2-1.

4(a) Existing Land Use

Figure 4-1 has been prepared using available data from the Schuyler County Geographic Information System (GIS) Department and the classification codes of the New York State Office of Real Property Tax Services (NYSORPTS) within the Study Area (2-mile radius from the Project Area boundaries). The “Schuyler County Parcel Data” data set, derived from the Property Class attribute, was used to produce Figure 4-3. The Study Area includes approximately 15,650 acres of land (inclusive of the 771-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 New York State (NYS).

(1) Land Use Classification Codes

Land Use Classification Code Categories developed by the NYSORPTS that occur within the Study Area include agricultural; residential; vacant land; commercial; recreation and entertainment; industrial; public services; and wild, forested, or conservation lands and public parks. Land Use Classification Codes describe the primary use of each parcel and are consistent throughout NYS. Each land use classification that occurs within the Study Area is described below and shown on Figure 4-1.

Agricultural – 100

The NYSORPTS describes agricultural land as property used for the production of crops or livestock. Approximately 2,158 acres within the Study Area are classified as Agricultural Land (Code 100). The New York State Department of Agriculture and Markets (NYSDAM) 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 7,554 acres of land within the Study Area are mapped as Agricultural Districts (Schuyler County – District 2 and Chemung County – District 5), including 6,963 acres in the Town of Dix and 591 acres in the Town of Orange (see Figure 4-6).

The Project Area was evaluated to determine impacts to Agricultural Land, including mapped Agricultural Districts, as part of the Project. No NYSORPTS-classified Agricultural Land (Code 100) land is mapped within the Project Area. A total of 615 acres of land mapped within Schuyler County Agricultural District 2 is included in the Project Area.

The Project will have a fenced-in area of 352 acres, including the collection substation and switchyard, proposed within mapped Agricultural Districts. Although the Project is sited within mapped Agricultural Districts, the fenced-in area of the Project will only occupy 336.94 acres (0.36%) of all lands designated as mapped Agricultural Districts within Schuyler County. Furthermore, the fenced-in area of the Project will only occupy 2.83% of all lands designated as mapped Agricultural Districts within the Town of Dix. Table 4-1 below includes the temporary and permanent impacts to mapped Agricultural Districts and soils, including Prime Farmland.

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

County/Town	Agricultural District	Temporary Soil Impact in Agricultural District 2	Permanent Soil Impacts (not being restored) in Agricultural District 2	Percentage of Impact on Prime Farmland and Farmland of Statewide Importance Within the Town*	Percentage of Permanent Impact on Prime Farmland and Farmland of Statewide Importance within the County**
Schuyler/Town of Dix	District 2	367.11 acres	4.53 acres	0.03%	0.00%

*Percentage includes all Prime Farmland and Farmland of Statewide Importance within the Town of Dix.

**Percentage includes all Prime Farmland and Farmland of Statewide Importance within Schuyler County.

The construction and operation of solar facilities is typical within designated Agricultural Districts in NYS, as these facilities have minimal soil impacts and the land can be restored to substantially its prior agricultural condition following decommissioning. Although solar panels will cover 199.96 acres of agricultural crop land, only 0.27 acres of ground disturbance from racking posts will occur on these lands. Ground disturbance for the Project will be limited to the installation of posts for racking systems and footings for equipment in the collection substation and Point of Interconnect (POI) switchyard and construction of access roads.

Refer to sections 4(s), (t), (v), and (w) below for additional information on farmland classifications and potential impacts to agriculture.

Residential – 200

The NYSORPTS describes residential land as property used for human habitation. This does not include living accommodations such as hotels, motels, and apartments as they are included in the commercial category (400) (see below). The NYSORPTS classifies approximately 5,948 acres of the Study Area as Residential Land (Code 200), including 4,304 acres in the Town of Dix and 1,644 acres in the Town of Orange.

There are no residential properties within the Project Area. The residential land within the Study Area consists primarily of a mix of single-family residential properties (Code 210) and residential properties also used in agricultural production (Code 241).

Vacant Land – 300

The NYSORPTS describes vacant land as property that is not in use, is in temporary use, or lacks permanent improvement. Approximately 3,842 acres of the Study Area are classified as Vacant Land (Code 300), including 3,265 acres in the Town of Dix and 578 acres in the Town of Orange. There are approximately 618.22 acres classified as Vacant Land (Code 300) within the 771-acre Project Area, some of which are being farmed for corn and alfalfa. Areas that are not being farmed are mostly forested.

There are seven properties within the Study Area located adjacent to Project Area boundaries that are classified as Vacant Land. Five of these properties consist of partially forested area.

Commercial – 400

The NYSORPTS describes commercial land as property used for the sale of goods and/or services. There are six parcels (comprising approximately 99 acres) classified as Commercial Land Use (Code 400) located within the Study Area, all of which are located in the Town of Dix. There are no properties classified as Commercial Land Use within the Project Area.

The nearest Commercial Land Use parcel is approximately 3,075 feet (approximately 0.58 miles) from the Project Area boundary and is classified as a “Converted Residence” (Code 483) and covers approximately 1.5 acres. The owner is “Dundee Supply, LLC” and the stores are Raceway Liquors and Raceway Grocery (Google Streetview, August 2018).

Recreation and Entertainment – 500

There are three Recreation and Entertainment Land Use (Code 500) properties (approximately 1,062 acres) within the Study Area, all of which are located in the Town of Dix. There is one Recreation and Entertainment Land Use (Code 500) property (approximately 1,512 acres) located partially within the Project Area. These properties are owned by the Watkins Glen International Raceway (the participating landowner), which began in 1948 as an 8-lap, 52.8-mile amateur road race called the “Watkins Glen Grand Prix.” Since then, the Watkins Glen International Raceway has grown into a permanent track on 550 acres with racing of nearly every class, including the World Sportscar Championship, Trans-Am, Can-Am, NASCAR Cup Series, the International Motor Sports Association, Formula One, and the IndyCar Series. The Watkins Glen International raceway also hosts numerous other regionally significant events such as the Finger Lakes Wine Festival and periodic large-scale concerts. There is one Recreation and Land Use parcel located within the Project Area; the portion of

this parcel located north of Hedden Road is used for agricultural purposes and the portion of this parcel located south of Hedden Road is mostly forested with some agricultural use. The portion north of Hedden Road will include solar arrays and the portion south of Hedden Road will contain the Project's POI Facilities. The addition of the proposed solar energy center to this parcel, along with the overall Project Area, will result in what is anticipated to be the largest solar field to be located at a racetrack in the United States.

Community Services – 600

There are no Community Services (Code 600) properties within the Study Area or the Project Area.

Industrial – 700

The NYSORPTS describes industrial land as property used for the production and fabrication of durable and nondurable man-made goods. There are eight Industrial Land Use parcels (comprising approximately 30 acres) within the Study Area, located wholly in the Town of Dix. There are no Industrial Land Use parcels within the Project Area. The nearest Industrial Land Use parcel is the Townsend Grange #1208 building, located 2,083 feet (approximately 0.39 miles) north of the Project, and is currently vacant. Based on this review, there are no impacts to Industrial Land proposed as part of the Project.

Public Services – 800

There are five Public Services Land Use parcels (comprising approximately 97 acres) within the Study Area, all of which are located in the Town of Dix. The parcels include utilities, railroads, and waste management uses. Talisman Energy USA Inc. owns a 9-acre property off Baker Hill Road, located 723 feet south of the Project Area. The property has compressor stations and/or metering stations for delivery of natural gas to transmission lines. NYS Electric & Gas Corporation (NYSEG) operates a switching station on a 0.5-acre parcel off County Route 329, located 10,935 feet northeast of the Project Area. TE Products Pipeline Co. LLC, Enterprise owns a 9-acre parcel located 7,324 feet east of the Project Area. Norfolk Southern Corporation owns six parcels totaling 74 acres, located 2,714 feet to 11,277 feet west of the Project Area. The property is part of Norfolk Southern's Corning Secondary from Geneva to Himrod Junction, New York. Arrowhead Disposal, a waste management company, is located on an 18-acre property approximately 8,134 feet south of the Project Area. The company offers both residential and commercial trash and recycling services to homes and businesses in the surrounding area.

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

The NYSORPTS describes Wild, Forested, or Conservation Lands and Public Parks as reforested lands, preserves, and private hunting and fishing clubs. There are 31 Wild, Forested, or Conservation Lands and Public Parks Land Use (Code 900) parcels (2,048.88 acres) within the Study Area. There are no Wild, Forested, or Conservation Lands and Public Parks Land Use (Code 900) parcels within the Project Area.

The National Conservation Easement Database was reviewed to identify records of land trusts and conservation easements within the Study Area. The database review indicated that no easement areas are located entirely or partially within the Study Area.

Overall Land Use Classifications within the Study Area

See Table 4-2 below for a summarization of all NYSORPTS Land Use Classification Code Categories that occur within the Study 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)	2,158	14
Residential (200)	5,948	37
Vacant Land (300)	3,842	25
Commercial (400)	99	1
Recreation and Entertainment (500)	1,062	7
Industrial (700)	30	0
Public Services (800)	97	1
Wild, Forested, or Conservation Lands and Public Parks (900)	2,049	13
Roads/Non-Parcel Areas	363	2
Total:	15,647	100

Note: Land use calculations were derived from parcel boundary data obtained from Schuyler County tax maps combined with land use classification data from the NYSORPTS parcel boundary data. Any discrepancies among the two sources was resolved using data from the Schuyler County Assessment Information website.

4(b) Existing Utility Facilities Map

Figure 4-2 illustrates known existing major electric and gas facilities within the 2-mile Study Area. These utility facilities include existing overhead or underground lines for electric or gas, including two natural gas pipelines (the Empire Pipeline and Columbia Pipeline) and one microwave service/cell tower, as applicable. Refer to Exhibit 12 for information on the existing natural gas pipelines and Exhibit 21 for information pertaining to the gas/oil wells within the Project Area.

4(c) Tax Parcel Map

Information on the current land use, tax parcel number, and owner of record for each property 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 Schuyler County.

4(d) Existing and Proposed Zoning Districts

The Town of Dix encompasses the entire Project Area with zoning regulations and mapping. A scaled map of the existing zoning districts within the Town of Dix is included as Figure 4-4. There are currently no new proposed zoning districts in the Town. A description of the current zoning districts is presented below, including permitted and prohibited uses within each zone. The Study Area includes the Town of Dix and the Town of Orange.

Town of Dix

The Town of Dix Zoning Ordinance, adopted February 2016, established five zoning districts within the Town including the Low-Density Rural District (LDR), Medium Density Residential District (MDR), Mixed Use District (MU), Business Park District (BP), and Special Entertainment District (SE). See Appendix 31-1 of Exhibit 31 for a copy of this Zoning Ordinance.

The principal permitted uses of each district are allowed by right as long as they meet the zoning regulations. They do not require site plan review; they require a form be submitted to the Code Enforcement Officer for review. All special permitted uses require a special use permit and site plan review. Uses that are not listed for a zoning district are prohibited in that district. The Project Area is located in the LDR and the SE. The Study Area consists of LDR, MDR, MU, and SE. The principal permitted uses for each district are listed below:

Low Density Rural District (LDR)

The intent of the LDR district is to reserve areas within the Town that have prime agricultural or state-significant soils; provide for agricultural uses and uses compatible with or supportive of agriculture within the district; avoid conflicts between agricultural and non-agricultural uses by limiting the type and amount of non-agricultural uses within the district; direct non-agricultural development away from prime agricultural soils, state significant soils, and farm operations; and retain tracts of land of sufficient size to encourage viable farming operations. Principal permitted uses in the LDR include Single-Family Dwelling; Two-Family Dwelling; Agricultural, livestock, or crops; Bar or Tavern; Bed & Breakfast; Brewery and Winery; Family Day Care; Commercial Greenhouse; Stables; Garage; Personal Greenhouse; Roadside Stand; Shed; Small-Scale Solar; and Nature Preserve. Tier 3 Solar Energy Systems, such as the Project, are a permitted use within the zone.

Prohibited uses in the LDR, include Adult Use, Bar, or Tavern; Convention Center; Cultural Facility; Indoor Entertainment/Recreation; Outdoor Professional Entertainment/Recreation; Hotel/Motel; Motor Vehicle Services (washing, accessory sales, gasoline station); Professional Office; Residential Care Facility; Restaurant; Retail Sales; or Light Industrial/Light Manufacturing.

Medium Density Residential District (MDR)

The intent of the MDR district is: to provide areas for primarily residential neighborhoods and small-scale commercial development that respect the rural, agricultural character, and economic capabilities of the Town of Dix; to provide variety in housing options in the Town of Dix; ensure efficiency of infrastructure and costs by placing new development near existing nodes and future infrastructure upgrades; and direct non-agricultural development away from prime agricultural soils, state significant soils, and farm operations. Principal permitted uses in the MDR district include Single-Family Dwelling; Two-Family Dwelling; Bar or Tavern; Bed & Breakfast; Family Day Care; Garage; Personal Greenhouse; Roadside Stand; Shed; Small-Scale Solar; and Nature Preserve.

Prohibited uses in the MDR district include Adult Use; Agricultural Research Facility; Agricultural Support Industry; Bar or Tavern; Campground; Club; Hunting & Fishing; Convention Center; Cultural Facility; Indoor Entertainment/Recreation; Outdoor Arcade Entertainment/Recreation; Outdoor Professional Entertainment/Recreation; Hotel/Motel; Junkyard; Motor Vehicle Services

(washing, accessory sales, gasoline station); Professional Office; Restaurant; Retail Sales; Stables; Storage Units; Light Industrial/Light Manufacturing; and Mineral Extraction.

Mixed Use District (MU)

The intent of the MU district is to provide areas that include a strong cluster and mix of different uses and services in the Town of Dix including residences, shops, civic and public spaces, places to work, and recreational opportunities all within close proximity; allow flexibility and opportunity for appropriately scaled economic developments in the Town of Dix; provide variety in housing options in the Town of Dix; ensure efficiency of infrastructure and costs by placing new development near existing nodes and future infrastructure upgrades; and direct non-agricultural development away from prime agricultural soils, state significant soils, and farm operations. Principal permitted uses in the MU district include Single-Family Dwelling; Two-Family Dwelling; Agricultural, Livestock, or Crops; Bar or Tavern; Bed & Breakfast; Brewery and Winery; Family Day Care; Commercial Greenhouse; Garage; Personal Greenhouse; Roadside Stand; Shed; Small-Scale Solar; and Nature Preserve.

Prohibited uses in the MU district include Adult Use, Convention Center, Outdoor Professional Entertainment/Recreation, and Junkyard.

Special Entertainment District (SE)

The intent of the SE district is to provide standards for development that will enhance the success of the Town's large-scale entertainment legacy; provide areas that include a strong cluster and mix of recreational and economic opportunities; ensure efficiency of infrastructure and costs by placing new development near existing nodes and future infrastructure upgrades; and direct non-agricultural development away from prime agricultural soils, state significant soils, and farm operations. Principal permitted uses in the SE include Agricultural, Livestock, or Crops; Bed & Breakfast; Brewery & Winery; Family Day Care; Garage; Shed; and Small-Scale Solar. Tier 3 Solar Energy Systems, such as the Project, are a permitted use within the zone.

Prohibited uses in the SE include Single-Family Dwelling; Two-Family Dwelling; Accessory Dwelling Unit; Mobile Home Park; Agricultural Research Facility; Agricultural Support Industry; Commercial Greenhouse; Home Occupation; Junkyard; Kennel; Motor Vehicle Repair; Motor Vehicle Sales; Motor Vehicle Services (washing, accessory sales, gasoline station); Residential

Care Facility; Stables; Storage Units; Personal Greenhouse; Roadside Stand; and Nature Preserve.

Town of Orange

The Town of Orange has not instituted zoning and therefore, does not have zoning districts nor a zoning ordinance.

4(e) Adopted Comprehensive Plans

Town of Dix Comprehensive Plan

The Project Area is wholly located in the Town of Dix in Schuyler County. The Town adopted the Town of Dix's Comprehensive Plan (also called the "Pioneer Plan") in 2001 and is included in Appendix 4-1. It is also available for download from the Southern Tier Central Regional Planning and Development Board website at: <http://www.townofdix.com/Dix%202001%20Comp%20Plan.pdf>. The Comprehensive Plan provides an inventory and analysis of the Town's environmental and social resources and trends.

The Town of Dix Comprehensive Plan is organized into two main sections. The first section is an inventory and analysis of existing conditions in the Town of Dix that includes information on demographics, housing, community resources and services, environmental features, and transportation. The second section is a Community Development Plan that consists of guiding policies, future land use, preferred development patterns, and implementation strategies to serve as the blueprint for future decisions impacting the Town.

The Town of Dix was formed in April 17, 1835, and named for the Hon. John A. Dix. It is located in Schuyler County in the Seneca Lake Valley. The Comprehensive Plan indicates that while most of land use is residential, most of the Town's land mass is essentially farmland and open space. The Watkins Glen International Raceway, the owner of the land on which the Project is proposed, is the largest private land use in the Town, consisting of 1,412 acres in total.

The following summary provides a brief review of the key trends, concerns, and opportunities identified in the Existing Conditions.

Location

The Town of Dix is located in Schuyler County in the Southern Tier region of NYS. The Town is less than 25 minutes north of Corning, New York, and approximately 45 minutes south of Geneva, New York. The historic villages of Watkins Glen and Montour Falls lie within the Town's boundaries. Major interstate routes (90 and 86) allow for easy access to the Town and region. At the same time, Dix's location is a major limiting factor in the attraction of new businesses due to its seclusion in the Seneca Lake Valley.

Population Characteristics

The population of the Town at the time the Comprehensive Plan was written (2001) was 4,153 and was estimated to grow by an additional 5.3 percent by 2015. However, according to the 2010 United States Census, the population of the Town of Dix had declined to 3,864.

Age Characteristics

The age profile for the Town Dix indicated a slow increase in the "35 to 64" group, while the "19 to 34" group was expected to decrease, and the "less than 18" and "65 and over" groups were expected to remain stable. Overall, the age breakdown of the community is expected to stay fairly constant and a recommendation was made for the Town to consider the impact of the aging of the "65 and over" group on the local economy. As the baby boomer generation retires, changing service needs should be considered such as transportation, health care, etc.

Household Characteristics

At the time of the preparation of the Comprehensive Plan, the current median household income in the Town of Dix was less than the median income in Schuyler County. The Town's household size was 2.67 persons and has been decreasing over time. According to the 2010 Census, the median household size in the Town of Dix was 2.30 persons.

Education

In 2001, approximately 52 percent of Town residents completed a high school degree or equivalent as their highest level of education. About 9 percent completed an Associate's degree, while 6 percent finished a Bachelor's degree. Two percent of Town residents have attained a graduate degree compared to the County at approximately 7 percent. The Town of Dix lags behind

the County in the completion of higher education. According to the 2014-2018 American Community Survey published by the United States Census Bureau, it was estimated that 89.5 percent of the Town population had a high school diploma or higher, and that 16.0 percent had a bachelor's degree or higher; while within Schuyler County, 86.5 percent of the population had obtained a high school diploma or higher, and 35.9 percent had obtained a bachelor's degree or higher.

Unemployment Rate

The Town of Dix and Schuyler County have stayed fairly consistent with the State's unemployment levels. The Town and County are working together to improve the local economy and provide more jobs to residents including the Schuyler County Business Park, state-designated Economic Development Zones, and improvements to the Watkins Glen International Raceway.

Housing

Between 1994 and 2000, the Town of Dix averaged 15 building permits per year for new residential development, with an average project cost of about \$29,000. This record of development indicates that affordable housing options are available in the Town. In 1999, several homes with a projected cost exceeding \$100,000 were built.

Getting to Work

Most residents of the Town of Dix drive to work, which is not expected to change as a result of the Project.

Community Services

Fire, Ambulance, and Police Facilities

The County Sheriff and NYS Police provide coverage for the Town. There are two municipal and volunteer fire companies that service the Town of Dix (the Watkins Glen Fire Department and the Beaver Dams Volunteer Fire Company). Ambulance service is provided by Schuyler County Ambulance located in Watkins Glen.

Educational Facilities

Students in the Town of Dix primarily attend Watkins Glen Schools. A small portion of the Town is also serviced by the Bradford Central School District.

Parks and Recreation

The Watkins Glen State Park and Catherine Creek State Wildlife Management Area are both located in the Town of Dix and offer a variety of recreational opportunities for residents.

Environmental Features

The environmental landscape of Dix is composed of rolling hills, steep-sided plateaus, and valleys. Numerous orders of creeks drain the Town, the majority of which empty into Seneca Lake. The Town has many areas with “steep slopes,” where it is recommended that development be avoided.

Areas surrounding Glen, Shequaga, and Post Creek are 100-year floodplains, as does Catharine Creek Marsh. The Town of Dix has many streams and wetlands, and approximately 95 percent of the Town drains into Seneca Lake via Catharine Creek or Glen Creek.

Land Use

As stated earlier, the majority of the Town of Dix’s land use is residential with a large amount of farmland and open space. Future development patterns should attempt to conserve natural areas of importance, protect the viability of agriculture by minimizing noncomplimentary uses, and ensure future development is located in areas that best fit the Town’s desired development pattern. As stated in the Town’s Comprehensive Plan, developing and enhancing regional approaches to economic development and continuing to advance community development objectives is a priority; as such, the Town states that they recognize the need to support regional economic development efforts in Schuyler County and will work to strengthen job growth and diversification at the local level. The Project would be in line with these stated economic development goals as it will result in economic benefits for the Town, County, and school district through a Payment in Lieu of Taxes (PILOT) agreement (see Exhibit 27).

Agriculture

The Town of Dix has 21,942 acres of agriculture and open space. Farms are an essential component of the Town's rural landscape. Farmers in the Town can participate in a State-certified, County-managed Agricultural District Program. Future development should limit fragmenting blocks of contiguous farmland. Moreover, prime agricultural soils should be protected from development, even if they are not being farmed immediately, to ensure future areas of production can be utilized.

Transportation

The Town has a well-defined network of Town, County, and State highways that allow easy access to most areas. The State is responsible for Routes 14, 414, 329, and 409 in the Town of Dix, while the County maintains Routes 16, 17, 18, and 19. The Town maintains the majority of the secondary road network.

Policies

The second section of The Town of Dix Comprehensive Plan is a Community Development Plan that consists of guiding policies, future land use, preferred development patterns, and implementation strategies to serve as the blueprint for future decisions impacting the Town. The following summary provides a brief review of the four key policy areas that address the main areas of interest in the community that include, rural living, agriculture, business and industry, and community development and resources.

Rural Living

It is the policy of Dix to locate future residential development to efficiently use existing infrastructure capacity, avoid high quality farmland, and ensure attractive rural neighborhoods. Dix desires conservative approaches to residential development including cluster development and, where possible, building close to existing nodes of development (hamlets and villages). Dix supports a diversity of housing opportunities for residents of all incomes, ages, and family structures.

Policy Objectives:

1. Designate areas for appropriate future residential development.

2. Increase opportunities for entry-level housing that may include small homes, mobile home parks, apartments, and townhouses.
3. Design future residential development to protect environmental features.
4. Direct development to areas where public sewer and water exist or can be easily extended.
5. Protect rural character and prime agricultural soils.
6. Limit single-lot residential development off County and State highways.

Agriculture

It is the policy of Dix to continue to have vibrant agricultural businesses that contribute to the community's rural character and economic health. The Town will support land use regulations that will protect agricultural businesses from residential encroachment and encourage value added farm enterprises.

Policy Objectives:

1. Ensure agricultural remains a viable and profitable industry in the Town.
2. Reduce potential for future conflict between farming and non-farm residential uses.
3. Promote agricultural tourism opportunities including bed and breakfasts, harvest festivals, and other opportunities unique to the agriculture industry.

Economic Development and Industry

It is the policy of the Town of Dix to have areas of office, retail, and service uses that are convenient, clean, and designed to have minimal impact on the rural landscape. The Town recognizes the need to support regional economic development efforts in Schuyler County and will work to strengthen job growth and diversification at the local level.

Policy Objectives:

1. Define areas best suited for future commercial usage.
2. Expand diversity of retail and service uses.
3. Encourage additional commercial development that will not compete directly with Watkins Glen Main Street businesses.
4. Ensure adequate public utilities to support future commercial areas.

5. Work with Schuyler County Partnership for Economic Development (SCOPED) to maximize the future business park and ensure that only compatible, environmentally friendly uses are permitted.

Community Development and Resources

It is the policy of Dix to have community resources that meet the needs of residents and support local businesses. The Town enjoys the health and safety benefits provided by local police, fire, and medical services. Residents' welfare is ensured by the Watkins Glen and Bradford Central School Districts, the State Park system, the faith community, and the Cornell Cooperative Extension. The collective efforts of these public and not-for profit groups are an invaluable asset to the community, and it is essential that the level of service provided to the Town is coordinated based on future needs.

Policy Objectives:

1. Continue delivery of services to ensure the health, safety, and welfare of the community.
2. Locate future community facilities in areas accessible by town residents.
3. Develop strategies to increase public awareness of the services offered by public and not-for-profit resources in the Dix community.
4. Create opportunities for increased public involvement in building a better community.
5. Develop innovative community building activities.

Town of Orange Comprehensive Plan

The Town of Orange Comprehensive Plan was adopted in 2012 and is included in Appendix 4-2. It is also available for download on the Schuyler County website at <https://www.schuylercounty.us/DocumentCenter/View/1379/Town-of-Orange-Comprehensive-Plan?bidId=>. Currently, the Town of Orange has no land use controls. The Comprehensive Plan was created to outline an approach to future economic and social development as well as environmental conservation.

The Town of Orange envisions being a quality, stable place to live as well as being an attractive destination for visitors and tourists, while maintaining its natural beauty and rural way of life. The environment is one of the primary concerns of the Town.

The Plan includes a Regional Growth and Development Policy that encourages the Town to have a relationship that strengthens the regional economy, and protects sensitive environmental areas such as Waneta, Lamoka, and Seneca Lakes, preserves local character and enhances the quality of life for residents. The Town recognizes that its individual well-being depends on the continued advancement of shared efforts for community improvements.

Schuyler County Countywide Comprehensive Plan

The Schuyler County Countywide Comprehensive Plan (CWCP) was adopted in 2014 and amended in 2015 and is included in Appendix 4-3 and is available for download on the Schuyler County website at <http://schuylercounty.us/566/County-Wide-Comprehensive-Plan>. The CWCP serves three purposes:

1. Provides an overall shared vision for the Villages, Towns, and the County, as well as a blueprint to achieve that vision.
2. The CWCP will assist municipalities in the development of their local plans.
3. Provides an opportunity for our municipalities to work together, leverage their resources, and reduce duplication of efforts.

The Plan's policy framework centers on four key elements:

- I. Public Health & Safety
- II. Economic Health & Prosperity
- III. Environmental Health & Sustainability
- IV. Community Health & Livability

The Environmental Health and Sustainability policy is intended to guide the County in its role as a leader in sustainable practices across the region. Objectives of this policy include:

- A. To pursue new “cleaner” technologies in the agricultural industry to ensure that cultivation of the County's land is sustainable and uses the industry's best practices.
- B. To continue to utilize land use controls and review processes that protect open space and vacant land from inefficient development patterns and fragmentation of open space.
- C. To educate local decision-makers and residents on environmental stewardship efforts that apply to their geographical region (i.e., watersheds, energy efficiency, stream processes, forestry).

- D. To consider ways to decrease the County's environmental footprint. (i.e., improving energy efficiencies, reducing overall vehicle miles traveled, promoting efficient development patterns, erosion control, stormwater management).
- E. To consider ways to increase local production of renewable energy.

Schuyler County has over 250 kilowatts (kW) of solar capacity from both residential and commercial solar energy installations. At its peak they generate over 290,000 kilowatt-hours (kWh). The CWCP recommends that the County consider additional ways that solar energy can be included and promoted including integrating solar power into more development projects.

Schuyler County has additional capacity for clean technologies such as wind and solar energy, which could include large industrial-scale energy production, small scale commercial, or residential installations. A concerted effort to install these technologies where appropriate along with reasonable guidelines for contextually sensitive development would result in greater local reliance for energy, greater savings in energy costs, and the minimized negative impact of development on the county's natural resources (i.e., land, air, and water) and rural character.

Commercial solar energy installations provide the Town of Dix with over 14 KW, or nearly 6% of the current solar capacity of Schuyler County. The CWCP recommends that the Town of Dix consider additional ways that solar energy can be included and promoted including integration during municipal power upgrades and developments as well as resident and business education on state energy programs.

There is currently no solar energy production in the Town of Orange. The CWCP recommends the Town of Orange consider additional ways to include and promote solar energy in the Town including reviewing town laws to ensure that solar power is adequately addressed, integrating solar power into municipal power upgrades and developments, and resident and business education on state energy programs.

4(f) Publicly Known Proposed Land Uses

All publicly known proposed land uses within the Study Area are depicted on Figure 4-7, Recreational and Other Sensitive Land Uses. There is a proposed 2-MW Solar Facility located on County Route 16 proposed in the Town of Orange. There are also several proposed subdivisions and proposed upgrades to an arcade facility in the Town of Dix that include:

- Bonham subdivision (Tax ID 104-1-43-2) is a two-lot subdivision located on State Route 414.
- Bauman subdivision (Tax ID 76.00-1-62) is a two-lot subdivision located at 2435 County Route 17.
- Hollenbeck subdivision (Tax ID 76.00-1-16.1) is a two-lot subdivision located on County Route 17.
- Proposed upgrades to an existing go kart, mini golf, and arcade facility located at 2374 State Route 414 (Tax ID 86-1-3.2) by Cornell Building and Development Inc. No new uses are proposed; just upgrades to the existing facility.

There are no specific proposed land use plans in Schuyler County.

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

Areas of special designation such as agricultural districts, flood prone zones, critical environmental areas, and recreational/sensitive areas are depicted on Figure 4-5. Figure 4-5 was prepared using the NYSDAM Agricultural Districts Mapping for Schuyler County (2019), as well as data from Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps. Current agricultural use is depicted on Figure 4-6. Figure 4-6 was prepared using data from the United States Department of Agriculture (USDA) National Agricultural Statistics Service (2018). There are no designated inland waterways, coastal areas, State Environmental Quality Review Act (SEQRA)-designated critical environmental areas, or groundwater management zones within the Study Area.

Two of the three project parcels in the Project Area are located in Schuyler County Agricultural District 2 (SCHU002). The first agricultural district in Schuyler County was created in 1995. The County currently has three agricultural districts (Districts 1, 2, and 3), which cover approximately 101,000 acres or about 46% of the County.

Ag District	Municipalities
District 1	Hector, part of Montour
District 2	Dix, Orange, Reading, and Tyrone
District 3	Catharine, Cayuta, and Montour

Every 8 years, the County reviews each district and the County Legislature decides whether to continue, terminate, or modify the district. Individual parcels are also added and removed from the districts during this 8-year review process to better reflect current land use. Property owners can also request to have their parcels added to an agricultural district during the Annual Review, which is open to any of the agricultural districts in the County.

Of the two Project parcels, parcel 84.00-1-41.111 is in Agricultural District 2. Parcel 84.00-1-32 is not located in an Agricultural District.

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 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 below identifies the sources used to populate Figure 4-7, as well as whether those land use types were identified within the Study 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	New York State Department of Environmental Conservation (NYSDEC) List of Wild, Scenic, and Recreational Rivers (Accessed 2019) National Wild and Scenic Rivers Mapping (Accessed 2019)	No
Open Space	NYS Department of State, Office of Planning & Development GIS Database (Accessed 2019) NYSDEC GIS Database (Accessed 2019)	Yes
Known Archaeological, Geologic, Historic, or Scenic Area	NYS Historic Preservation Office (SHPO) Cultural Resources Information System (CRIS) (Accessed 2019) NYS Department of State, Office of Planning & Development GIS Database (Accessed 2019) USDA NRCS Web Soil Survey (Accessed 2019) Erie Canal National Heritage Corridor (Accessed 2019)	Yes

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

Land Use	Sources Reviewed	Within Study Area?
Parks	Available Mapping for the Town of Dix (Accessed 2019) Schuyler County Office of Community Development Services GIS Services (Accessed 2019) NYS Office of Parks, Recreation and Historic Preservation (OPRHP; Accessed 2019) NYSDEC State Lands Mapping (Accessed 2019) National Park Service Mapping (Accessed 2019)	Yes
Designated Wilderness, or Forest Preserve Lands	NYSDEC GIS Database (Accessed 2019) National Wilderness Preservation System (Accessed 2019)	No
Conservation Easement Lands	NYSDEC GIS Database (Accessed 2019) NYS Department of State, Office of Planning & Development GIS Database (Accessed 2019) National Conservation Easement Database (Accessed 2019)	No
Designated Scenic Byways	NYSDEC GIS Database (Accessed 2019) NYS Department of State, Office of Planning & Development GIS Database (Accessed 2019) NYS Department of Transportation List of Scenic Byways	No
Nature Preserves	NYSDEC GIS Database (Accessed 2019)	No
Designated Trails	NYS OPRHP (Accessed 2019) NYSDEC GIS Database (Accessed 2019)	Yes
Public Access Fishing Areas	NYSDEC GIS Database (Accessed 2019) NYSDEC State Lands Mapping (Accessed 2019)	No

Potential impacts to each of the sensitive land uses within the Study Area have been evaluated and avoided to the maximum extent practicable as discussed in this exhibit and Exhibit 24 Visual Impacts.

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 visual impacts on the use and enjoyment of areas within 1 mile of Project facilities. This assessment includes evaluation of the compatibility of the Project's aboveground structures including commercial-scale solar arrays, access roads, inverters, and fencing, as well as any aboveground and underground interconnections, with surrounding land uses. The Project Area totals approximately 771 acres and the area inside all fences for the Project totals approximately 354 acres. Within the fenced area, Project Components will physically occupy approximately 301.36 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 facilities, and commercial areas.

As described above, the Town of Dix adopted the Town of Dix Zoning Ordinance in February 2016 and the Town of Dix Comprehensive Plan in June 2001. Existing land uses have been described in the sections above according to the Town of Dix's local regulations and Comprehensive Plan in addition to the NYSORPTS land use classification codes. Project Facilities are proposed to be located on land classified as Vacant by NYSORPTS.

Table 4-4. Impacts to Land Use Types

Land Use Type	Components Facility Area (acres)	Access Roads (acres)	Collection Lines (miles)	Substation (acres)
Industrial	0.05	0.04	<0.01	-
Recreation & Entertainment	13.92	0.38	0.51	1.18
Roads/Non-Parcel Areas	0.06	0.02	0.03	-

Table 4-4. Impacts to Land Use Types

Land Use Type	Components Facility Area (acres)	Access Roads (acres)	Collection Lines (miles)	Substation (acres)
Vacant Land	288.53	4.50	4.08	-
Total	302.56	4.94	4.62	1.18

As shown in Table 4-4 above, a vast majority of Project Components and access roads are located on land classified by NYSORPTS as Vacant Land. As noted earlier, the majority of the Vacant Land on Site consists for agricultural or forested land uses. Of the 288.53 acres of Vacant Land to be occupied by Project Components, 201.15 acres consist of agricultural land and 70.88 acres consist of forested land. Similarly, access roads occupy a total of 4.94 acres of Vacant Land. Of this 4.94 acres, 3.83 acres consist of agricultural land, and 0.32 acres consist of forested land. Collection lines occupy a total 4.62 miles of Vacant Land. Of this 4.62 miles, 2.89 miles consist of agricultural land, and 0.91 miles consist of forested land.

The Project is not proposed on Residential Land. The Applicant designed and sited the Project to provide adequate setbacks to adjacent landowners, so they do not pose any adverse effects.

The compatibility of the Project with existing land uses was evaluated based on NYSORPTS data and through review of the Town of Dix Zoning Ordinance (2016), the Town of Dix Comprehensive Plan (2001), and the Town of Dix Local Law No. 2 of 2018. All of the solar arrays are located on land classified as Vacant Land. Collection circuits and access roads, which are not located within public rights-of-way, are also located on Vacant Land and Recreational and Entertainment 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.

The Town of Dix enacted Local Law No. 2 of 2018 (Solar Energy Systems), and subsequently made amendments to this law in both 2019 and 2020. This law contains specific zoning and requirements for solar energy facilities and is described in detail in Exhibit 31.

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. 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 mitigated by operating only during daylight hours. 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.

The Project Area is located adjacent to the Watkins Glen International Raceway, which is an automobile race track located in Watkins Glen, New York, at the southern tip of Seneca Lake. The "Glen," as it is called, has hosted road racing of nearly every class, including the World Sportscar Championship, Trans-Am, Can-Am, NASCAR Cup Series, the International Motor Sports Association, and the IndyCar Series. The race track originated in 1948 when Cameron Argetsinger, a law student at Cornell University, started an amateur road race to be called the "Watkins Glen Grand Prix" that included a 6.6-mile course using mostly paved roads with a short dirt and gravel stretch. The Watkins Glen International Raceway is still used today for sporting events as well as for festivals and concerts and is the single landowner of parcels within the Project Area. The Watkins Glen Solar Energy Center will not impact use of the raceway and the community benefit it provides in the Town of Dix. Rather, the Project will result in additional financial benefits through a PILOT agreement for the Town, County, and local school district. See Exhibit 27 for more information.

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

The collection lines (conveying energy generated from the solar arrays from the Project inverters to the collection substation) will be placed underground for the entirety of their length and installed primarily via direct trenching with some portions to be proposed via horizontal direction drill (HDD) to avoid wetland resources and roadways. 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. The only aboveground interconnection line proposed consists of a short span, approximately 75 to 100 feet long, from the proposed switchyard to the existing transmission line. Once built, the Project will not have any adverse impacts to existing or proposed land uses. The

proposed collection substation and switchyard, as well as the aboveground interconnection line, will be located within land classified as Vacant Land. Existing forested area has been avoided for the POI facilities by utilizing existing cleared land used for agriculture.

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 4.59 miles of collection lines are sited within land designated as Vacant, Entertainment, Industrial, and Recreational Land. Additionally, 0.03 miles of collection lines overlap roadways. The collection circuit will be underground and will only require temporary impacts to land uses as part of installation.

4(l) Conformance with Coastal Zone Management

This section is not applicable as the Project is not located within a designated coastal area or in direct proximity of a designated inland waterway. Therefore, conformance with the Coastal Zone Management Act is not required.

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 in order to show the relationship with existing structures and vegetation cover types. Appendix 11-1 also depicts aerial photos overlaid with proposed Project facilities, access roads, and limits of clearing at a larger scale with additional details.

4(o) Aerial Photograph Information

Aerial photographs in Figure 4-8 reflect current Project Area conditions and indicate the photographer and the date photographed.

4(p) Community Character of the Study Area

The Project is located in Central New York in a rural area in Schuyler County as shown on the figures included in this Exhibit. The Applicant worked with the Town of Dix, landowners, and stakeholders to identify specific characteristics of the community that are of particular importance in the region. Land within the Town of Dix is primarily used for residential uses and agriculture and consists of agricultural fields, residences, farm buildings, farm ponds, outbuildings, secondary roads, small paved roads, and unimproved farm roads. While the Study Area occupies more than 15,000 acres, the amount of topical land used for the Project Components is minimal (302.56 acres) in comparison; thus, the Project will have little impact on existing land uses in the Study Area. The primary interference will be during construction, which is temporary. Thereafter, current recreational, cultural, and other concurrent uses, such as farming, can resume as usual. Through a review of zoning ordinances, the Town of Dix Comprehensive Plan, Town of Orange Comprehensive Plan, Schuyler County Comprehensive Plan, and Schuyler County Agricultural Development and Farmland Protection Plan, the community character of the area was assessed.

Community character includes features and interactions of the natural, social, and built environment, and how those features are used and appreciated in the community. 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 important to the region.

Very importantly to community character, the Project is being located adjacent to the Watkins Glen International Raceway. As noted above, the Watkins Glen International Raceway was established in 1948 as an 8-lap, 52.8-mile amateur road race called the “Watkins Glen Grand Prix.” Since then it has grown into a permanent track on 550 acres with racing of nearly every class, including the World Sportscar Championship, Trans-Am, Can-Am, NASCAR Cup Series, the International Motor Sports Association, Formula One, and the IndyCar Series. The Watkins Glen International Raceway also plays host to numerous other regionally significant events such as the Finger Lakes Wine Festival and periodic large-scale concerts. It serves as a major economic driver for the Town and surrounding areas and, as noted in the Town of Dix Comprehensive Plan, the Watkins Glen International Raceway is the largest private land use in the Town, consisting of 1,412 acres in total. Utilizing this land to achieve 50 MW of energy provides additional benefits by providing renewable energy to the existing New York electrical

transmission system and economic benefits in the form of a proposed PILOT agreement for the Town, County, and local school district.

The natural environment includes agricultural land, forested land, conservation lands, public parks, and water resources in the area. Approximately 96 acres of tree clearing will occur within the Limit of Disturbance (LOD), which is approximately 12.5% of the total 771-acre Project Area. This represents a very small portion of the total forested land within the Study Area. Furthermore, approximately 5,047 linear feet (0.96 miles) of vegetative screening will be planted, reducing the net impact to forested land. The proposed vegetative screening contains native trees and shrubs. See Landscaping Plan in Appendix 11-1, Preliminary Design Drawings. Project components were sited away from forested land to the maximum extent practicable to prevent wildlife habitat loss. Approximately 212.30 acres of agricultural land will be utilized for the Project. This land will be used during the economic life of the Project. Thereafter, the land will be restored to substantially its existing condition and will be available to be reclaimed for agricultural use after the Project is decommissioned, limiting the impacts to this land type. There are no public parks, conservation lands, or conservation easement areas within the Project Area. Additionally, there are no conservation easement areas within the Study Area. Water resources in the area include nearby Seneca Lake, Glen Creek, Vanzandt Hollow, and Shequaga Creek, and on-site delineated wetlands and streams. Seneca Lake is located outside the Project Area and will not be impacted by Project construction, and the listed creeks will not be directly impacted. Delineated wetlands and streams have been avoided to the maximum extent practicable when siting Project Components. Additionally, the Erie Canalway National Heritage Corridor Map indicates the Study Area and the Project Area are not within the Corridor and therefore, the Project will have no impact.

Seneca Lake can also be considered part of the social environment. The City of Geneva enacted the Seneca Lake Watershed Management Plan in 2010, adding onto the 1999 plan (named "Setting a Course for Seneca Lake: the state of the Seneca Lake Watershed"). The purpose of the plan is to serve as a long-term strategy for the protection, restoration, and enhancement of water quality of the lake and ensure compatible land use and development, and additionally to promote the use of the surrounding area for public access and recreation. This greatly contributes to the community character of the region as a primarily rural area located along a body of water. The Watkins Glen Solar Energy Center will not impact Seneca Lake as part of the social or natural environment as it does not impede the recreational use of the lake. The social environment can

also include those developed areas that encompass restaurants, shops, meeting places, churches, and centers for community gatherings. 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 traffic may result from construction traffic through the Town of Dix.

Lastly, the built environment includes some of the social buildings described above, industrial and commercial areas, public utilities, public service land, and residential buildings. The closest industrial and commercial areas within the Study Area are located 0.39 and 0.58 miles away, respectively. The Project will not impact those areas, aside from the temporary and minimal construction traffic. There are 17 residential parcels located adjacent to the Project Area and the Project has been sited, in most cases, several hundred feet away from non-participating residences to limit any impact.

The natural, social, and built environment contribute to the rural community character of the area. The Applicant intends to protect this character through the careful design and siting of the Watkins Glen Solar Energy Center.

Per 16 NYCRR § 1000.24(b)(1), the NYSORPTS 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. The LSZs serve to provide a more in-depth evaluation of viewer circumstances and visual experiences. The LSZs were developed using land cover classifications datasets from the 2016 United States Geological Survey (USGS) National Land Cover Dataset (NLCD) to provide distinct and usable landscape categories. These NLCD land cover groupings were then refined based on aerial photo interpretation and general field review of the 5-mile VSA. This effort resulted in the definition of four final LSZs within the full 5-mile VSA: Agricultural field, Forested, Developed, and Open. These LSZs are described further below.

- Zone 1 – Agricultural – Agricultural and open field consists of cultivated crops, hay, or pasture lands. Views from this zone are typically from larger open areas along roadsides and can include homes offset farther from the road that are not included in the Zone 3 Developed category. Frequently, there are hedgerows or small tree groups that provide intermittent screening.

- Zone 2 – Forested – This zone includes mature deciduous and coniferous tree groups. Views from inside the Forest Zone are highly limited since it is assumed that tree canopy precludes outward views unless there are intermittent gaps in trees. Forested areas may include roadway segments where there are permanent residents.
- Zone 3 – Developed – This zone includes villages, towns, cities, rural residential-abutting roadways, and transportation corridors. The Developed Zone includes the local roadways where rural residential development is intermittently established adjacent and along the existing road network as well as accounting for roadway travelers. Often adjacent buildings in this zone are visual impediments for views as well as roadside vegetation. There may be open road corridors with less screening that could afford longer distant views.
- Zone 4 – Open – This zone includes miscellaneous other open parcels not used for agriculture that may have minor development with less visually obstructive features such as playgrounds, ballfields, or cemeteries as well as other open lands with few visual obstructions such as minor expanses of open water, barren land, land with short scrub shrub vegetation, and emergent wetlands.

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 Town of Dix Comprehensive Plan, the Schuyler County Agricultural and Farmland Protection Plan, 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 utilized in Project siting are directly related to the community character of the area. The selected technology and the use of tracking panels, based on topographic conditions of the site, and market conditions at the time of procurement, will result in an efficient layout, minimizing the area of land, to the maximum extent practicable, that is required in order to achieve 50 MW of energy production. The collection lines have been placed underground to decrease aboveground impacts along the public roads. A

Landscape Plan, included within Appendix 11-1, depicts the vegetative screening that will surround the Project Components to reduce visibility and 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 19, Exhibit 20, Exhibit 22, and Exhibit 24. 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) and depict existing characteristics of the Project Area and surrounding setting.

4(r) Erie Canal National Heritage Area Corridor

The Erie Canal National Heritage Area Corridor connects more than 500 miles of waterway stretching from Buffalo to Whitehall. The Erie Canalway National Heritage Corridor Map indicates the Study Area and the Project Area are not within the Corridor and therefore, the Project will have no impact.

4(s) Project Area Farmland Classification Mapping

A scaled map of the existing farmland classifications (e.g., All Areas of Prime Farmland, Prime Farmland if Drained, etc.) and associated soil types within the Project Area is included in Exhibit 21 as Figure 21-2. A discussion of how the Project will avoid or minimize impacts to agricultural soils and the effects the Project has on use of the land for future farming operations is included in Section 4(w) below.

4(t) Farmland Classification within Limits of Disturbance

Of the LOD within the Project Area, the total area comprises approximately 2.48 percent of land classified as Prime Farmland, 90.3 percent classified as Farmland of Statewide Importance, and

6.59 percent classified as Not Prime Farmland. None of the land within the LOD is classified as Prime Farmland if Drained.

A discussion of how the Project will avoid or minimize, to the maximum extent practicable, impacts to agricultural soils within the “Prime Farmland” classification is included in Section 4(w) below.

4(u) Publicly Known Proposed Land Use Map

As stated in Section 4(f) above, there are five publicly known, proposed land uses within the Study Area. The Watkins Glen Solar Energy Center will use vacant and agricultural land only during the useful economic life of the Project and it will be returned substantially to a state that can be farmed after decommissioning. More information on decommissioning is included in Section 4(w) below and in Exhibit 29.

According to the Town of Dix, the DRS 2 MW proposed solar energy project will be located on an 85-acre property located on County Route 16 in the Town of Orange and does not have specific acreage developed for the solar farm available. The property is a mix of forested land, wetland, and open field. The solar panel acreage will be able to be reclaimed as agricultural land after decommissioning.

Upgrades to the arcade facility by Cornell Building and Development Inc. will not have an impact on agricultural land, as improvements are being made to existing facilities and no new development is proposed.

There are three 2-lot subdivisions that are currently under review by the Town of Dix that include:

- Bonham subdivision, located on State Route 414.
- Bauman subdivision, located at 2435 County Route 17.
- Hollenbeck subdivision, located on County Route 17.

None of the proposed land uses are expected to have a significant impact on agricultural land use in the Study Area or Project Area.

According to the Schuyler County Agricultural Development and Farmland Protection Plan, Schuyler County has experienced slow but steady growth in the 1980s and 1990s resulting in limited development pressures on certain parts of the County. There was, as a result, a significant loss of farmland within the County totaling approximately 4.79 acres per day between 1982 and

1992. The trend slowed in the mid to late 1990s with conversions and farmland losses between 1992 and 1997 at a reduced rate of approximately 0.02 acres per day.

Growth in the County is generally seen advancing west from Ithaca and northeast from the Elmira-Corning area and is focused on lakeside and lakeview areas. Farmland conversion pressure, therefore, has been limited to selected areas and the general loss of farmland is likely attributed to other factors such as low profitability.

Approximately 65,281 acres of Schuyler County is farmed, accounting for about 31% of the total land mass. There were 205 farms generating sales of at least \$2,500 in 1997 and 130 of these produced \$10,000 or more of product. Altogether, these farms produced some \$14,034,000 in sales in 1997. This is the agricultural economic base of Schuyler County and it is fairly diverse with a very strong dairy sector composed of both small and large size farms. The County gained 1,097 acres of farmland between 1997 and 2007. Cropland increased by 110 acres and harvested cropland acreage expanded by 3,370 acres or 12.9% compared to a decade earlier. Development is not overwhelming agriculture, although there are some pressures in select areas near Seneca Lake that are prime for vineyards, as well as other recreational areas.

4(v) Agricultural Impacts and Farmland Protection Plan

The Schuyler County Agricultural Development and Farmland Protection Plan adopted by Schuyler County in 1999 and supplemented in 2008 provided in Appendix 4-4 promotes farming and agriculture within the county. The document summarizes information about the present state of agriculture in Schuyler County as well as actions that can be taken to address current issues. It can be used to provide guidance for the farming community to assist in decisions that may affect farming and agriculture.

The Project will not impact Schuyler County's ability to uphold the seven goals identified in the Agriculture and Farmland Protection Plan, as follows:

- Goal 1:** Preserve a critical mass of both farmers and agri-businesses to support competition and provide a foundation for a sound agricultural economy, maintaining a base of 60,000 acres of Schuyler County land in farming (including 30,000 acres in active use for cultivation) and preserving a minimum of 20,000 acres through purchase or lease of development rights and other farmland protection mechanisms.

- Goal 2:** Increase the economic returns associated with farming by generating at least 20% higher prices at the farm gate, increasing net farm incomes by 2% per year to achieve parity with the typical non-farm wage earner (approximately \$20,000/year) and produce a rate of return of at least 8% on farm investments to be able to attract private capital.
- Goal 3:** Diversify and broaden the agricultural economic base to provide new income opportunities, increasing agricultural sales in greenhouse, fruit, vegetable, poultry, sheep, goats, beef, and other diversified products by 5% per year.
- Goal 4:** Increase public recognition of the value of agriculture and farmland and develop a better understanding of farm issues by non-farmers.
- Goal 5:** Attract new entrepreneurs and younger households to farming ventures and expand the availability of capital to finance such enterprises.
- Goal 6:** Protect farmers from development and regulatory intrusions that threaten their ability to operate in a normal competitive fashion as agricultural enterprises.
- Goal 7:** Integrate agricultural development into Town and County economic strategies and land use plans to take advantage of the farm opportunities, which will inevitably result from growth of the community as a whole.

Solar projects such as the Watkins Glen Solar Energy Center contribute to environmental sustainability of farms through harnessing solar energy within the Project Area and providing clean energy to surrounding communities. Concurrently, the Project will contribute to climate change mitigation by providing clean energy for distribution and consequently reducing the need for other fossil fuel technology operations to meet energy demands. As stated earlier, although the solar panels will cover 199.96 acres of agricultural crop land, only 0.27 acres of ground disturbance from racking posts (out of the total 6.61 acres of ground disturbance for the Project) will occur on these lands. The total 6.61 acres of ground disturbance for the Project will be limited to the installation of posts for 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 30 years and, as detailed in the Decommissioning Plan, the Applicant

will return lands within the Project Area substantially to their 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 Watkins Glen Solar Energy Center will not impede nearby agricultural land uses, including plantings, cattle grazing, bee keeping, or maintaining the use of the land for agricultural means. Solar facilities sited on agricultural land result in minimal soil impacts and the land can be restored substantially to its prior agricultural condition following decommissioning. This would not be possible for other types of development. The land could be further developed into uses that include:

- Bar or Tavern;
- Bed & Breakfast;
- Brewery and Winery;
- Day Care Center;
- Commercial Greenhouse;
- Stables;
- Nature Preserve;
- Mobile Home Park;
- Agricultural Research Facility;
- Campground;
- Convenience Store;
- Junkyard;
- Kennel;
- Motor Vehicle Sales/Repair;
- Storage Unit; and
- Mineral Extraction.

All of the uses listed above and 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 agricultural land to be used for solar energy production, helps keep larger parcels contiguous through lease payments, and protects 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(w) Description of Avoidance and Minimization of Impacts to Natural Resources and Prime Farmland

Approximately 264.09 acres of agricultural land disturbance is anticipated to occur within the Project's proposed LOD. This includes temporary and permanent disturbance as well as areas outside the fence line. Temporary disturbance will be caused by grading and laydown areas. Of the 391.53 acres of total disturbance required for the overall Project (including non-agricultural land), 9.71 acres will occur on land classified as Prime Farmland, which is only 0.23 percent of the total 4,209 acres of Prime Farmland within the Town of Dix. To minimize impacts to agricultural land, the Applicant will also comply with the NYSDAM Guidelines for Agricultural Mitigation for Solar Energy Projects, revised in October 2019, to the maximum extent practicable for requirements specific to restoration, monitoring, and decommissioning. As stated in the NYSDAM guidelines, an Environmental Monitor will coordinate with the NYSDAM, 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.

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 selected solar technology was chosen to avoid concrete foundations and will instead be installed via driven posts, thus minimizing ground disturbance since no excavation will be required for their installation. Topsoil will be stripped, stockpiled, and returned to reduce impacts during decommissioning of the Project. An additional discussion on agricultural restoration techniques following decommissioning is included in Exhibit 29(b)(3).

References

- City of Dix. 1993. *City of Dix Local Waterfront Revitalization Program*. Accessed November 2019. Available at:
https://docs.dos.ny.gov/opd-lwrp/LWRP/Dix_C/Original/City%20of%20Dix.pdf.
- Cornell University Geospatial Information Repository (CUGIR). 2018. Schuyler County Agricultural Districts (2018). Accessed November 2019. Available at:
<https://cugir.library.cornell.edu/catalog/cugir-007973>.
- Cornell University Agricultural Information Repository. 2015. Schenectady County Agricultural Districts (2015). Accessed November 2019. Available at:
<https://cugir.library.cornell.edu/catalog/cugir-007985>.
- Erie Canalway National Heritage Corridor. 2019. *Erie Canalway National Heritage Corridor Map*. Accessed November 2019. Available at: <https://eriecanalway.org/explore/plan-your-visit>.
- ESRI ArcGIS. 2019. *National Wilderness Preservation System Map*. Accessed November 2019. Available at:
<https://www.arcgis.com/home/item.html?id=27af507dc6f64c72973191da13c8ac36>.
- National Conservation Easement Database. 2019. Accessed November 2019. Available at:
<https://www.conservationeasement.us/>.
- National Park Service (NPS). *NPS Map*. Accessed November 2019. Available at:
<https://www.nps.gov/subjects/hfc/index.htm>.
- New York State Department of Agriculture and Markets (NYSDAM). 2019. *Agricultural Districts Mapping*. Accessed November 2019. Available at:
<https://www.agriculture.ny.gov/ap/agsservices/agricultural-districts.html>.
- New York State Department of Environmental Conservation (NYSDEC). 2019a. GIS Database. Accessed November 2019. Available at:
<https://www.dec.ny.gov/lands/4979.html>.
- NYSDEC. 2019b. State Lands Interactive Mapper. Accessed November 2019. Available at:
<http://www.dec.ny.gov/outdoor/45478.html>.

- New York State Department of State. 2019. Geographic Information Gateway. Accessed November 2019. Available at: <http://opdgiq.dos.ny.gov/#/home>.
- New York State Department of Taxation and Finance. 2019. Property Type Classification Codes – Assessor’s Manual. Updated January 28, 2019. Accessed November 2019. Available at: <https://www.tax.ny.gov/research/property/assess/manuals/prclas.htm>.
- New York State Department of Transportation (n.d.). *Scenic Byways*. Accessed November 2019. Available at: <https://www.dot.ny.gov/display/programs/scenic-byways/lists>.
- New York State Historic Preservation Office. 2019. Cultural Resources Information System. Accessed November 2019. Available at: <https://cris.parks.ny.gov/Login.aspx?ReturnUrl=%2f>.
- New York State Historic Preservation Office (n.d.). *Heritage Areas*. Accessed November 2019. Available at: <https://parks.ny.gov/historic-preservation/heritage-areas.aspx>.
- New York State Public Service Commission. 2016. Case 15-E-0302, Order Adopting a Clean Energy Standard. Accessed November 2019. Available at: <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={44C5D5B8-14C3-4F32-8399-F5487D6D8FE8}>.
- Schoharie County Board of Supervisors. 2017. *Agricultural and Farmland Protection Plan, Schoharie County*. March 17, 2017. Accessed November 2019. Available at: https://www4.schohariecounty-ny.gov/PdfFiles/AgDev/FinalPlanMarch17_2017.pdf
- Schuyler County Agriculture and Farmland Protection Board and Plan Advisory Committee. 2018. 2018 Agricultural and Farmland Protection Plan, Schuyler County, NY. Accessed November 2019. Available at: <http://www.mcbdc.org/files/FINAL-ADOPTED-2018-2-14-Schuyler-County-Ag-Plan.pdf>
- Town of Dix. 1996. *Town of Dix Comprehensive Plan, Schuyler County, New York*. February 1996. Accessed November 2019. Available at: <https://townofdix.com/index.php/document-center/town-of-Dix-comprehensive-plan/48-town-of-Dix-comprehensive-plan/file>

Town of Dix. 2011. *Amendments to the Town of Dix Comprehensive Plan, Schuyler County, New York*. February 21, 2011.

Town of Dix. 2018. Community Locations and Directions. Accessed November 2019. Available at: <https://townofdix.com/index.php/community/locations-directions>.

Town of Dix. 2019. Town of Dix, Schuyler County, New York Zoning Ordinance, May 23, 2016. Updated July 17, 2019.

United States Department of Agriculture. 2018. Natural Resources Conservation Service: Web Soil Survey. Accessed November 2019. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

United States Census Bureau. 2018. 2014-2018 American Community Survey. Accessed May 2020. Available at: <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2018/>.