Solar Energy Law Local Law 1-2019 Repeal & Replacement Local Law 2-2018

1. Authority

This Solar Energy Local Law is adopted pursuant to sections 261-263 of the Town Law of the State of New York, which authorize the Town of Dix to adopt zoning provisions that advance and protect the health, safety and welfare of the community, and, in accordance with the Town law of New York State, "to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor."

2. Statement of Purpose

A. This Solar Energy Local Law is adopted to advance and protect the public health, safety, and welfare of the Town by creating regulations for the installation and use of solar energy generating systems and equipment, with the following objectives:

- 1) To take advantage of a safe, abundant, renewable and non-polluting energy resource:
- 2) To decrease the cost of electricity to the owners of residential and commercial properties, including single-family houses;
- 3) To increase employment and business development in the Town, to the extent reasonably practical, by furthering the installation of Solar Energy Systems;
- 4) To mitigate the impacts of Solar Energy Systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources, and;
- 5) To create synergy between solar and existing Town goals, such as: protecting assets that are essential to the Town's rural character; developing and enhancing regional approaches to economic development; advancing community development objectives.

3. Definitions

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM: A combination of Solar Panels and Solar Energy Equipment integrated into any building envelope system such as vertical facades, semitransparent skylight systems, roofing materials, or shading over windows, which produce electricity for onsite consumption.

FARMLAND OF STATEWIDE IMPORTANCE: Land, designated as "Farmland of Statewide Importance" in the U.S. Department of Agriculture Natural Resources Conservation Service

(NRCS)'s Soil Survey Geographic (SSURGO) Database on Web Soil Survey, that is of state wide importance for the production of food, feed, fiber, forage, and oilseed crops as determined by the appropriate state agency or agencies. Farmland of Statewide Importance may include tracts of land that have been designated for agriculture by state law.

GLARE: The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, discomfort, or loss in visual performance and visibility in any material respects.

GROUND-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System that is anchored to the ground via a pole or other mounting system, detached from any other structure, that generates electricity for onsite or offsite consumption.

HAZARDOUS WASTE: as defined by the United States Environmental Protection Agency in 40 CFR Part 261 and New York State Department of Environmental Conservation in 6 NYCRR Part 371 as well as other material regulated for the purpose of release, reuse, disposal, or recycling (e.g. CFC's, ethylene glycol, toxic heavy metals, oil). Disposal of such waste shall be conducted in accordance with the provisions set forth in Section 8: Permitting requirements for Tier 3 Solar Energy Systems, Sub-Section H: Decommissioning and in Appendix 4: Example Decommissioning Plan.

NATIVE PERENNIAL VEGETATION: native wildflowers, forbs, and grasses that serve as habitat, forage, and migratory way stations for pollinators and shall not include any prohibited or regulated invasive species as determined by the New York State Department of Environmental Conservation.

POLLINATOR: bees, birds, bats, and other insects or wildlife that pollinate flowering plants, and includes both wild and managed insects.

POLLINATOR PLANT: flora which attract or provide habitat for pollinator species such as bees, birds, bats, and other insects or wildlife that pollinate flowering plants.

PRIME FARMLAND: Land, designated as "Prime Farmland" in the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)'s Soil Survey Geographic (SSURGO) Database on Web Soil Survey, that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses.

ROOF-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System located on the roof of any legally permitted building or structure that produces electricity for onsite or offsite consumption.

SOLAR ACCESS: Space open to the sun and clear of overhangs or shade so as to permit the use of active and/or passive Solar Energy Systems on individual properties.

SOLAR ENERGY EQUIPMENT: Electrical material, hardware, inverters, conduit, storage devices, or other electrical and photovoltaic equipment associated with the production of electricity.

SOLAR ENERGY SYSTEM: The components and subsystems required to convert solar energy into electric energy suitable for use. The term includes, but is not limited to, Solar Panels and Solar Energy Equipment. The area of a Solar Energy System includes all the land inside the perimeter of the Solar Energy System, which extends to any interconnection equipment. A Solar Energy System is classified as a Tier 1, Tier 2, or Tier 3 Solar Energy System as follows.

- A. Tier 1 Solar Energy Systems include the following:
 - a. Roof-Mounted Solar Energy Systems
 - b. Building-Integrated Solar Energy Systems
- B. Tier 2 Solar Energy Systems include Ground-Mounted Solar Energy Systems with system capacity up to 25 kW AC and that generate no more than 110% of the electricity consumed on the site over the previous 12 months.
- C. Tier 3 Solar Energy Systems are systems that are not included in the list for Tier 1 and Tier 2 Solar Energy Systems.

SOLAR PANEL: A photovoltaic device capable of collecting and converting solar energy into electricity.

STORAGE BATTERY: A device that stores energy and makes it available in an electrical form.

4. Applicability

- A. The requirements of this Local Law shall apply to all Solar Energy Systems permitted, installed, or modified in the Town after the effective date of this Local Law, excluding general maintenance and repair.
- B. Solar Energy Systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law.
- C. Modifications to an existing Solar Energy System that increase the Solar Energy System area by more than 5.0% of the original area of the Solar Energy System *or* by more than an additional area of more than 2.0 acres (exclusive of moving any fencing), whichever area threshold is met first, shall be subject to this Local Law.
- D. All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code ("Building Code"), the NYS Energy Conservation Code ("Energy Code"), and the Town Code.

5. General Requirements

A. A building permit shall be required for installation of all Solar Energy Systems.

- B. Local land use boards are encouraged to condition their approval of proposed developments on sites adjacent to Solar Energy Systems so as to protect their access to sufficient sunlight to remain economically feasible over time.
- C. Issuance of permits and approvals by the Town Planning Board shall include review pursuant to the State Environmental Quality Review Act [ECL Article 8 and its implementing regulations at 6 NYCRR Part 617 ("SEQRA")].

6. Permitting Requirements for Tier 1 Solar Energy Systems

All Tier 1 Solar Energy Systems shall be permitted in all zoning districts and shall be exempt from site plan review under the local zoning code or other land use regulation, subject to the following conditions for each type of Solar Energy Systems:

A. Roof-Mounted Solar Energy Systems

- 1) Roof-Mounted Solar Energy Systems shall incorporate, when feasible, the following design requirements:
 - a. Solar Panels on pitched roofs shall be mounted with a maximum distance of 8 inches between the roof surface the highest edge of the system.
 - b. Solar Panels on pitched roofs shall be installed parallel to the roof surface on which they are mounted or attached.
 - c. Solar Panels on pitched roofs shall not extend higher than the highest point of the roof surface on which they are mounted or attached.
 - d. Solar Panels on flat roofs shall not extend above the top of the surrounding parapet, or more than 24 inches above the flat surface of the roof, whichever is higher.
- 2) Glare: All Solar Panels shall have anti-reflective coating that meets commercially reasonable standards.
- 3) Height: All Roof-Mounted Solar Energy Systems shall comply with the height limitations in Appendix 3.

B. Building-Integrated Solar Energy Systems shall be shown on the plans submitted for the building permit application for the building containing the system.

7. Permitting Requirements for Tier 2 Solar Energy Systems

All Tier 2 Solar Energy Systems shall be permitted in all zoning districts as accessory structures and shall be exempt from site plan review under the local zoning code or other land use regulations, subject to the following conditions:

A. Glare: All Solar Panels shall have anti-reflective coating that meets commercially reasonable standards.

- B. Setbacks: Tier 2 Solar Energy Systems shall be subject to the setback regulations specified for the accessory structures within the underlying zoning district. All Ground-Mounted Solar Energy Systems shall only be installed in the side or rear yards in residential districts.
- C. Height: Tier 2 Solar Energy Systems shall comply with the height limitations in Appendix 3.
- D. Screening and Visibility.
 - 1) All Tier 2 Solar Energy Systems shall have views minimized from adjacent properties to the extent reasonably practicable.
 - 2) Solar Energy Equipment shall be located in a manner to reasonably avoid and/or minimize blockage of views from surrounding properties and shading of property to the north, while still providing adequate solar access.

E. Lot Size: Tier 2 Solar Energy Systems shall comply with the existing lot size requirement specified for accessory structures within the underlying zoning district.

8. Permitting requirements for Tier 3 Solar Energy Systems

All Tier 3 Solar Energy Systems are permitted through the issuance of a Special Use Permit and are subject to site plan application requirements set forth in this Section.

- A. Applications for the installation of Tier 3 Solar Energy System shall be:
 - 1) reviewed by Code Enforcement Officer for completeness. Applicants shall be advised within 10 business days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.
 - 2) subject to a public hearing to hear all comments for and against the application. The Planning Board of the Town shall have a notice printed in a newspaper of general circulation in the Town and post on the Town website at least 5 business days in advance of such hearing. Applicants shall have delivered the notice by first class mail to adjoining landowners or landowners within 2500 linear feet of the property at least 10 business days prior to such a hearing. Proof of mailing shall be provided to the Planning Board at the public hearing.
 - 3) referred to the Schuyler County Planning Department pursuant to General Municipal Law § 239-m if required.
 - 4) upon closing of the public hearing, the Planning Board shall take action on the application within 62 days of the public hearing, which can include approval,

approval with conditions, or denial. The 62-day period may be extended upon consent by both the Planning Board and applicant.

- B. Underground Requirements. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.
- C. Vehicular Paths. Vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction.

D. Signage.

- 1) With the exception of signage for public education mutually agreed upon by the Planning Board and the applicant, no signage or graphic content shall be displayed on the Solar Energy Systems except the following mandatory content: manufacturer's name, equipment specification information, safety information, and 24-hour emergency contact information. Said information shall be depicted within an area no more than 8 square feet and shall be depicted at each perimeter access gate or along the perimeter fence such that a sign is accessible every 2640 linear feet along the Solar Energy Systems perimeter.
- 2) As required by National Electric Code (NEC), disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations.
- E. Glare. All Solar Panels shall have anti-reflective coating that meets commercially reasonable standards.
- F. Lighting. Lighting of the Solar Energy Systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties. Wherever practicable, energy-efficient LED lighting shall be used.
- G. Tree-cutting. Removal of existing trees larger than 6 inches in diameter should be minimized to the extent possible.

H. Decommissioning.

- 1) Solar Energy Systems that have been abandoned and/or not producing electricity for a period of 6 months shall be removed at the Owner and/or Operators expense, which at the Owner's option may come from any security made with the Town as set forth in Section 10(b) herein.
- 2) A decommissioning plan (see Appendix 4) signed by the owner and/or operator of the Solar Energy System shall be submitted by the applicant, addressing the following:
 - a. The cost of removing the Solar Energy System.

- b. The time required to decommission and remove the Solar Energy System and any ancillary structures.
- c. The time required to repair any damage caused to the property by the installation and removal of the Solar Energy System.
- d. The process for proper handling, off-site disposal, and, where applicable, recycling of the Solar Energy System and any ancillary structures, including mandatory use of qualified recyclers for hazardous waste. Qualified recyclers must possess certifications that meet or exceed applicable federal, state, and local standards. Reycler certifications should meet or exceed ISO-, OHSAS 18001- or WEEE Labex-certified criteria for handling and recycling hazardous waste.

3) Security.

- a. The deposit, executions, or filing with the Town Clerk of cash, bond, or other form of security reasonably acceptable to the Town attorney and/or engineer, shall be in an amount sufficient to ensure the good faith performance of the terms and conditions of the permit issued pursuant hereto and to provide for the removal and restorations of the site subsequent to removal. The amount of the bond or security shall be 125% of the cost of removal of the Tier 3 Solar Energy System and restoration of the property with an escalator of 2% annually for the life of the Solar Energy System. The decommissioning amount shall be reduced by the amount of the estimated salvage value of the Solar Energy System, which shall be calculated annually by the owner and/or operator of the Solar Energy System.
- b. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the cash deposit, bond, or security shall be forfeited to the Town, which shall be entitled to maintain an action thereon. The cash deposit, bond, or security shall remain in full force and effect until restoration of the property as set forth in the decommissioning plan is completed.
- c. In the event of default or abandonment of the Solar Energy System, the system shall be decommissioned as set forth in Section 10(b) and 10(c) herein.
- I. Site plan application. For any Solar Energy system requiring a Special Use Permit, site plan approval shall be required. Any site plan application shall include the following information:
 - 1) Property lines and physical features, including roads, for the project site

- 2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures
- 3) A one- or three-line electrical diagram detailing the Solar Energy System layout, solar collector installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.
- 4) A preliminary equipment specification sheet that documents all proposed solar panels, significant components, mounting systems, and inverters that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.
- 5) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the Solar Energy System. Such information of the final system installer shall be submitted prior to the issuance of building permit.
- 6) Name, address, phone number, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the Solar Energy System.
- 7) Zoning district designation for the parcel(s) of land comprising the project site.
- 8) Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and property upkeep, such as mowing and trimming.
- 9) Erosion and sediment control and storm water management plans prepared to New York State Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the Planning Board.
- 10) Prior to the issuance of the building permit or final approval by the Planning Board, but not required as part of the application, engineering documents must be signed and sealed by a New York State (NYS) Licensed Professional Engineer or NYS Registered Architect.

J. Special Use Permit Standards.

1) Lot size

a. The property on which the Tier 3 Solar Energy System is placed shall meet the lot size requirements in Appendix 1.

2) Setbacks

- a. The Tier 3 Solar Energy Systems shall meet the setback requirements in Appendix 2.
- 3) Height

a. The Tier 3 Solar Energy Systems shall comply with the height limitations in Appendix 3 depending on the underlying zoning district.

4) Lot coverage

- a. The following components of a Tier 3 Solar Energy System shall be considered included in the calculations for lot coverage requirements:
 - Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
 - II. All mechanical equipment of the Solar Energy System, including any pad mounted structure for batteries, switchboard, transformers, or storage cells.
 - III. Paved access roads servicing the Solar Energy System.
- b. Lot coverage of the Solar Energy System, as defined above, shall not exceed the maximum lot coverage requirement of the underlying zoning district.
- 5) Fencing Requirements. All mechanical equipment, including any structure for storage batteries, shall be enclosed by a 7-foot-high fence, as required by NEC, with a self-locking gate to prevent unauthorized access.
- 6) Screening and Visibility.
 - a. Solar Energy Systems smaller than 10 acres shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that will harmonize with the character of the property and surrounding area.
 - b. Solar Energy Systems larger than 10 acres shall be required to:
 - Conduct a visual assessment of the visual impacts of the Solar Energy System on public roadways and adjacent properties. At a minimum, a line-of-sight profile analysis shall be provided. Depending upon the scope and potential significance of the visual impacts, additional impact analyses, including for example a digital viewshed report, shall be required to be submitted by the applicant.
 - II. Submit a screening & landscaping plan to show adequate measures to screen through landscaping, grading, or other means so that views of Solar Panels and Solar Energy

Equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible.

- i. The screening & landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate any adverse aesthetic effects of the system. The landscaped screening shall be comprised of a minimum of 1 evergreen tree plus 2 supplemental shrubs at the reasonable discretion of the Town Planning Board, all planted within each 10 linear feet of the Solar Energy System. Existing vegetation may be used to satisfy all or a portion of the required landscaped screening. A list of suitable evergreen tree and shrub species should be provided by the Town.
- 7) Agricultural Resources. For projects located on agricultural lands:
 - 1) Any Tier 3 Solar Energy System located on the areas that consist of Prime Farmland or Farmland of Statewide Importance which exceeds 50% of the area of Prime Farmland or Farmland of Statewide Importance on the parcel shall undergo additional impact analyses at the discretion of the Planning Board.
 - 2) Tier 3 Solar Energy Systems shall be required to seed at least 20% of the total surface area of all solar panels on the parcel with native perennial vegetation designed to attract pollinators, with the exception of Tier 3 Solar Energy Systems located on brownfield sites as defined by New York State Department of Environmental Conservation or similarly contaminated sites determined by the Planning Board to be unsuitable for attracting pollinators.
 - 3) To the maximum extent practicable, Tier 3 Solar Energy Systems located on Prime Farmland shall be constructed in accordance with the construction requirements of the New York State Department of Agriculture and Markets.
 - 4) Tier 3 Solar Energy System owners shall develop, implement, and maintain native vegetation to the extent practicable pursuant to a vegetation management plan by providing native perennial vegetation and foraging habitat beneficial to game birds, songbirds, pollinators, and pollinator plants. To the extent practicable, when establishing perennial vegetation and beneficial foraging habitat, the owners shall use native plant species, seed mixes, and pollinator plants.

K. Ownership Changes. If the owner or operator of the Solar Energy System changes or the owner of the property changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, and decommissioning plan. A new owner or operator of the Solar Energy System shall notify the zoning enforcement officer of such change in ownership or operator within 30 days of the ownership change.

9. Safety

- A. Solar Energy Systems and Solar Energy Equipment shall be certified under the applicable electrical and/or building codes as required.
- B. Solar Energy Systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if the Tier 3 Solar Energy System is located in an ambulance district, the local ambulance corps.
- C. If Storage Batteries are included as part of the Solar Energy System, they shall meet the requirements of any applicable fire prevention and building code when in use and, when no longer used, shall be disposed of in accordance with the laws and regulations of the Town and any applicable federal, state, or county laws or regulations.

10. Permit Time Frame and Abandonment

- A. The Special Use Permit and site plan approval for a Solar Energy System shall be valid for a period of 18 months, provided that a building permit is issued for construction or construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved, as required by the Planning Board, within 18 months after approval, the applicant or the Town may extend the time to complete construction for 180 days. If the owner and/or operator fails to perform substantial construction after 24 months, the approvals shall expire.
- B. Upon cessation of electricity generation of a Solar Energy System on a continuous basis for 6 months, the Town may notify and instruct the owner and/or operator of the Solar Energy System to implement the decommissioning plan. The decommissioning plan must be completed within 360 days of notification.
- C. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town may, at its discretion, utilize the bond and/or security for the removal of the Solar Energy System and restoration of the site in accordance with the decommissioning plan.

11. Enforcement

Any violation of this Solar Energy Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the zoning or land use regulations of the Town.

12. Severability

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

APPENDIX 1: LOT SIZE REQUIREMENTS

The following table displays the size requirements of the lot for Ground-Mounted Solar Energy Systems to be permitted.

Table 1: Lot Size Requirements

Zoning District	Tier 3 Solar Energy Systems
Residential Low Density	≥ 2 acres
Residential High Density	
Commercial / Business	≥ 5 acres
Light Industrial	N/A
Heavy Industrial	N/A
Agricultural / Residential	≥ 5 acres

Key:

--: Not Allowed N/A: Not Applicable

APPENDIX 2: PARCEL LINE SETBACKS

The following table provides parcel line setback requirements for Ground-Mounted Solar Energy Systems. Fencing, access roads and landscaping may occur within the setback.

Table 2: Parcel Line Setback Requirements

	Tier 3	Ground-M	lounted
Zoning District	Front	Side	Rear
Low Density Rural	50'	50'	50'
Medium Density Rural	50'	50'	50'
Business Park	30'	15'	25'
Mixed Use	30'	15'	25'
Special Entertainment	30'	15'	25'

Key:

--: Not Allowed

APPENDIX 3: HEIGHT REQUIREMENTS

The following table displays height requirements for each type of Solar Energy Systems. The height of systems will be measured from the highest natural grade below each solar panel.

Table 3: Height Requirements

	Tier 1 Roof- Mounted	Tier 2	Tier 3
Zoning District			
Low Density Rural	2' above roof	10'	15'
Medium Density Rural	2' above roof	10'	15'
Business Park	4' above roof	15'	20'
Mixed Use	4' above roof	15'	20'
Special Entertainment	4' above roof	15'	20'

Key: --: Not Allowed

APPENDIX 4: EXAMPLE DECOMMISSIONING PLAN

Date:	[Date]

Decommissioning Plan for [Solar Project Name], located at: [Solar Project Address]

Prepared and Submitted by [Solar Developer Name], the owner of [Solar Farm Name]

As required by the Town of Dix, [Solar Developer Name] presents this decommissioning plan for [Solar Project Name] (the "Facility").

Decommissioning will occur as a result of any of the following conditions:

- 1. The land lease, if any, ends
- 2. The system does not produce power for 6 months
- 3. The system is damaged and will not be repaired or replaced

The owner of the Facility, as provided for in its lease with the landowner, shall restore the property to its condition as it existed before the Facility was installed, pursuant to which may include the following:

- 1. Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations to a depth of 36 inches below the soil surface.
- 2. Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal waste disposal regulations.
- 3. Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

All said removal and decommissioning shall occur within 6 months of the Facility ceasing to produce power for sale.

The owner of the Facility, currently decommissioning.	[Solar Developer Name], is responsible for this
Facility Owner Signature:	Date: