

Local Law Number ____ of 2018

Solar and Wind Energy Systems and Facilities Law

History – This Local Law hereby amends and supersedes prior rules and regulations pertaining to solar panel and similar alternate energy source in the Town of Lansing Land Use Ordinance as amended March 18, 2015.

The Town Board of The Town of Lansing, New York, pursuant to Resolution dated _____, 2018, does hereby adopt and pass this Local Law Number ____ of 2018, and therefore, be it so enacted as follows:

SECTION 1 – AUTHORITY: This section is adopted pursuant to the powers granted by sections 261 and 263 of the Town Law of the State of New York, which authorize the Town of Lansing to adopt zoning provisions that advance and protect the health, safety and welfare of the community and “to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefore.”

SECTION 2 - PURPOSE: The purpose of this Local Law is to facilitate and regulate the development and operation of renewable energy systems based upon the use of sunlight and wind. It is in the public interest to allow for and encourage renewable energy systems in accordance with the Town of Lansing Comprehensive plan. Solar energy systems are appropriate in all zoning districts and wind energy systems are appropriate in designated zoning districts as provided in this law with minimized impacts on neighboring properties in the town, protection of the public health, safety and welfare of the town, minimized visual effects on the town, protection of natural features, aesthetics and character of the town.

SECTION 3 - DEFINITIONS: Words used in this Local Law shall have the following meanings.

ACCESSORY STRUCTURE – A building subordinate to the principal building on the same lot and used for purposes that are clearly related but incidental to those of the principal building.

BUILDING MOUNTED SOLAR ENERGY SYSTEM - A SOLAR ENERGY SYSTEM whose components are located on the exterior of any legally permitted building or structure or integrated into any building envelope system such as vertical facades, glass and in some cases windows, skylights, roofing materials and shading over windows.

EAF- Environmental Assessment Form.

FAA- Federal Aviation Administration.

FALL ZONE – The radius of an area below a wind energy system tower equal to the tower height plus the height of the generator and the attached blades plus a safety factor to allow for a clear space below in case of tower failure, partial or full disintegration of the tower or generating system or drop of debris such as ice from tower or generator.

GROUND MOUNTED SOLAR ENERGY SYSTEM – A SOLAR ENERGY SYSTEM whose components are attached to a pole or other mounting system anchored to the ground and detached from any other structure.

LARGE SCALE SOLAR ENERGY SYSTEM – A SOLAR ENERGY SYSTEM for the primary purpose of producing solar energy for on-site consumption whose components cover a land or roof area in excess of 5,000 square feet or have a name plate capacity greater than 25kW DC. Large scale solar energy systems may generate energy in excess of the energy requirements of a property if it is to be sold back to a public utility in accordance with the law.

LARGE SCALE WIND ENERGY SYSTEM – A WIND ENERGY SYSTEM for the primary purpose of producing wind energy for on-site consumption whose generating components mount on one or more towers or have a name plate capacity greater than 25kW DC. Large scale wind energy systems may generate energy in excess of the energy requirements of a property if it is to be sold back to a public utility in accordance with the law.

LEAF – Long Environmental Assessment Form

MECHANICAL MEANS – The use of solar energy collected to drive a turbine, engine or other mechanical device.

NAME PLATE CAPACITY – The maximum rated output of the electric power production of the photovoltaic or wind energy system in Direct Current (DC).

NET METERING – A billing arrangement whereby the solar or wind energy producer receives credit for excess electricity generated and delivered to the power grid, paying only for the power used in excess of that generated and delivered to the power grid.

PLANNING BOARD- The Planning Board of the Town of Lansing.

PRACTICABLE – Capable of satisfying the overall project purposes, after taking into consideration cost, time, technology and logistics.

SEQRA- The New York State Environmental Quality Review Act, generally codified at Environmental Conservation Law Article 8, and including the regulations pertaining thereto at 6 NYCRR Part 617, each as now exist or as hereafter amended or recodified.

SITE PLAN or SITE PLAN REVIEW- Site planning and reviews of site plans per the requirements of the Town of Lansing Land Use Ordinance and Article 16 of Town law, as enhanced by this local law.

SMALL SCALE SOLAR ENERGY SYSTEM - A SOLAR ENERGY SYSTEM for the primary purpose of producing solar energy for on-site consumption whose components cover a land area in of 5,000 square feet or less or have a name plate capacity of 25kW DC or less. Small scale solar energy systems may generate energy in excess of the energy requirements of a property if it is to be sold back to a public utility in accordance with the law.

SMALL SCALE WIND ENERGY SYSTEM - A WIND ENERGY SYSTEM for the primary purpose of producing wind energy for on-site consumption whose generating components mount on a single

tower and have a name plate capacity of 25kW DC or less. Small scale wind energy systems may generate energy in excess of the energy requirements of a property if it is to be sold back to a public utility in accordance with the law.

SOLAR EASEMENT – A document recorded pursuant to New York State Real Property 335-b, the purpose of which is to secure the right to receive sunlight across real property of another for continued access to sunlight necessary to operate a solar energy system.

SOLAR ENERGY FACILITY – The row(s) of solar panels including foundations and support frames, the space between rows and associated electric and electronic connections, panels, boxes, controls, inverters, switches, transformers, gates, access roads, fencing, etc.

SOLAR ENERGY FACILITY FOOTPRINT – The maximum occupied surface area taken up by the solar energy facility.

SOLAR PANEL – A photovoltaic device capable of collecting and converting solar energy into electrical energy.

SOLAR PHOTOVOLTAIC SYSTEM or SOLAR PV SYSTEM- A solar energy system used to generate electricity from sunlight using pv cell panels to create voltage from photons.

SOLAR THERMAL SYSTEM - A solar energy system used to generate heated liquid from sunlight for transfer to potable water, a process liquid or to a hydronic heating system using a collector and a transfer liquid or an alternative solar energy system used to generate heated air from sunlight to heat spaces through passive convection or active fan driven means using a collector.

TOWER- A structure not intended for human habitation upon which wind energy generating equipment are designed to be located. It includes without limit, freestanding Towers, lattice Towers, guyed Towers, monopoles and other similar structures which may employ camouflage technology.

TOWN- The Town of Lansing, in Tompkins County, New York.

TOWN BOARD- The Town Board of the Town of Lansing.

WIND ENERGY FACILITY – The support tower including foundations and support cables, the nacelle including electric generator, gearing, and braking, the rotor, blades, tail and other associated components, the associated electric and electronic connections, panels, boxes, controls, inverters, switches, transformers, gates, access roads, fencing, the fall zone around each tower, etc.

WIND ENERGY FACILITY FOOTPRINT – The maximum occupied surface area taken up by the wind energy facility.

SECTION 4 – APPLICABILITY:

- A. The requirements of this sections shall apply to all solar energy systems modified or installed after the effective date of this Local Law excluding general maintenance and repair.
- B. Solar energy systems are permitted in all town zones subject to the requirements described below.
- C. Wind energy systems are permitted in designated town zones subject to the requirements described below.

D. The installation of any solar energy system, as provided in this law, does not carry with it a right to a clear line of sight to the sun. It is understood that an applicant, installer or developer has the responsibility to make sure that the solar energy system(s) are positioned in such a way that they will achieve the optimal energy production practicable. It is the responsibility of the applicant, installer or developer to gain any and all easements or agreements to acquire and maintain a line of sight to the sun if necessary.

E. The installation of any wind energy system, as provided in this law, does not carry with it a right to an uninhibited wind resource. It is understood that an applicant, installer or developer has the responsibility to make sure that the wind energy system(s) are positioned in such a way that they will achieve the optimal energy production practicable. It is the responsibility of the applicant, installer or developer to gain any and all easements or agreements to acquire and maintain an uninhibited wind resource if necessary.

F. No solar energy system or wind energy system shall be located to reduce or impede the amount of sunlight that would fall on an adjacent lot absent the solar energy or wind energy system.

G. No solar energy system or wind energy system shall be located so as to reduce or impede the function of any other pre-existing solar energy system or wind energy system or of any radio or microwave communication device.

SECTION 5 – GENERAL REQUIREMENTS:

I. Solar Energy Systems:

A. A building permit is required for all solar energy system installations except:

1. Stand alone solar PV systems under 1,000 Watts that are not connected into the code required power serving a building or tied into the power grid.

B. Solar energy system installations must adhere to the setback requirements of the Town of Lansing Land Use Ordinance Section 504. Schedule II.

C. Solar energy system installations must adhere to the height requirements as follows:

1. For building mounted systems on primary buildings or accessory structures, they shall meet the height requirements for the Zoning Districts where they are installed when measured from the average grade to the highest point of the system and may extend a maximum of 6' above the roof line or to the height limit allowed by the requirements of the Town of Lansing Land Use Ordinance Section 504. Schedule II, whichever is lower.
2. For ground mounted systems, no components of the systems shall exceed 18' above finished grade.

D. All structures in the aggregate on a lot shall not exceed the maximum building lot coverage set forth in the Town of Lansing Land Use Ordinance Section 504. Schedule II.

E. Installation of solar energy systems are prohibited in:

1. Required open space or buffers or park set-aside areas;
2. Easement areas.

F. Fees shall be based upon the Town of Lansing Planning Department's Fee Schedule.

II. Wind Energy Systems:

A. A building permit is required for all wind energy system installations.

B. Wind energy systems are allowed only in the B2, RA, R3, IR and L1 zones except:

1. Stand alone wind energy systems under 1,000 Watts that are not connected into the code required power serving a building or tied into the power grid with combined tower and charger height including blades of 35' or less and blade length of 3' or less are allowed in all zoning districts with code officer approval.

C. Tower heights, tower infrastructure and fall zones are regulated in sections 9, 10 and 11 below.

D. Fees shall be based upon the Town of Lansing Planning Department's Fee Schedule.

SECTION 6 – SMALL SCALE SOLAR ENERGY SYSTEM:

A. No site plan review is required, but the Code Enforcement Officer shall have the discretion to require site plan review based upon individual circumstances.

B. Building or ground mounted solar energy systems are permitted as part of the primary or accessory structure they are attached to in all Zoning Districts

C. Ground mounted solar energy systems are not permitted in any front yard and must be sited entirely behind the front building line of the principal building on the lot.

D. A landscaped buffer may need to be provided around some or all of the solar energy system.

E. Solar energy systems that convert solar energy to mechanical means require site plan review.

SECTION 7 – LARGE SCALE SOLAR ENERGY SYSTEM:

A. Site plan review is required.

B. Large scale solar energy systems are permitted only in RA, R3 and IR Zoning Districts with site plan review.

C. Large scales solar energy facilities shall not be located in the following area unless otherwise approved by the Planning Board:

1. Prime or good farmland soils, prime farmland and farmland of statewide importance in the RA district;
2. Conservation easement land, other easement areas and storm water infrastructure areas;
3. Unique Natural Areas as designated by Tompkins County;
4. One Hundred year floodplains or wetlands;
5. Required open space, buffers or park set-aside areas;
6. Slopes greater than 15% unless applicant can demonstrate through engineering studies and to the satisfaction of the Planning Board and Code Enforcement Officer that the proposed development will cause no adverse environmental impact that will not be satisfactorily mitigated.

D. Setbacks shall be determined by Site Plan Review.

E. The solar energy facility footprint shall be enclosed by climb proof fencing not less than eight feet (8') in height and sufficiently secured to prevent unauthorized access, trespass and vandalism and will be equipped with locked enclosure gate(s). A locked gate must be provided at the intersection of the access way to the enclosure and a public road to obstruct unauthorized vehicles and must be located entirely on the lot and not in the public right-of-way.

F. Warning signs with the owner or operators contact information shall be placed on the enclosure and access gates and on the perimeter fencing at intervals not to exceed 50'. Warning signs shall not exceed 1 square foot in size. Warning signs are not counted as part of the compliance with the Town of Lansing Sign Local Law.

G. A Knox box must be provided at the access way gate to solar energy facilities.

H. Equipment and vehicles not used in direct support, renovations, additions or repair of any solar energy facility must not be stored or parked on the facility site.

I. Whenever reasonable, solar energy facility structures and the solar energy facility footprint should be screened from view by a landscape buffer with vegetation and structures jointed or clustered to avoid adverse visual impacts.

J. During the Site Plan Review process, the Planning Board may impose other conditions as part of its approval.

K. The use of sheep for controlling vegetation shall be allowed in the IR, RA and R3 Zoning Districts.

L. All appurtenant structures to solar energy facilities, including but not limited to, equipment shelters,

- storage facilities, transformers, and substations, shall be architecturally compatible with each other.
- M. Access standards may be imposed or required to insure adequate emergency and service access. Maximum use of existing roads, public and private, shall be made. Construction of pervious roadways (crushed stone, gravel, etc.) is preferred and shall be permitted notwithstanding underlying zoning district regulations which may provide otherwise. Road construction shall at all times, minimize ground disturbance and vegetation cutting, and road grades shall closely follow natural contours to assure minimal visual disturbance and reduce potential soil erosion.
- N. Solar energy facilities may have signs in addition to warning signs subject to the Town of Lansing Sign Local Law.
- O. Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections for solar energy facilities underground, depending upon appropriate soil conditions, shape and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground.
- P. Motion-activated or staff-activated security lighting around the equipment area of a solar energy facility or accessory structure or entrance may be installed provided that such lighting does not project off site.
- Q. Ground cover vegetation shall be planted to include appropriate forage for sheep.
- R. Provision for adequate water supply for grazing animals shall be present at such times as grazing animals are on site.

SECTION 8 – SOLAR ENERGY SYSTEM DESIGN STANDARDS:

- A. All roof mount solar energy system installations shall submit to the code officer an engineers stamped certification of suitability for installation on an existing or new roof structure or an engineers stamped specifications detailing modifications to a new or existing roof structure to accommodate the weight of the system prior to the issuance of a building permit.
- B. All roof solar energy system installations shall meet the standards of the current appropriate Building Code of New York State depending upon location, the type of installation and the current Fire Code of New York State and the current NEC in use by New York State or other adopted Electric Code for New York State.
- C. To the maximum extent practicable, solar energy systems must not obscure architectural details or features.
- D. When solar storage batteries are included as part of the solar energy system(s), they must be placed in a secure container or enclosure meeting the requirements of the New York State Building Code when in use and when no longer used shall be disposed of in accordance with the regulations of this law.
- E. Ground mount solar energy systems must comply with the Town of Lansing Storm Water Local Law.
- F. Removal of trees and other existing vegetation should be limited to what is necessary for construction, operation and maintenance and be offset with planting elsewhere on the property where practical.
- G. Any glare produced by the solar panels shall not impair or make unsafe the use of structures in line of sight, any vehicles operating on or off road, and boats or water craft operating on Lakes, ponds, inlets or streams, aircraft or other possible impacted entities as determined by the Town Planning Board.
- H. Large scale solar energy systems and facilities require the following submittals as part of the Site Plan Review application and process. Submittals shall be prepared by a Registered Professional Engineer licensed in the state of New York.
1. A site plan of showing existing conditions and proposed development. All means of shutting down a Photovoltaic system must be clearly marked.

2. Plans or drawings of the installation showing the proposed layout and any potential shading from nearby structures or vegetation. All means of shutting down a Photovoltaic system must be clearly marked.
3. Electrical diagram detailing the solar energy systems or facility and all equipment, components, structures, enclosures and devices.
4. Documentation of equipment, components, structures, enclosures and devices, including but not limited to specification sheets.
5. Calculation of designed production capacity.
6. A written Maintenance and Operating Plan.
7. A written Decommissioning Plan.
8. A Storm Water Pollution Prevention Plan (SWPPP).
9. Environmental Assessment Form (EAF).
10. Name, Address, Phone contact, Email contact, proof of insurance (liability, workers compensation and NYS Disability) and proof of certification for the proposed installer.
11. A document that clearly delineates the party responsible for decommissioning at the end of the life of the system and in the event the owner abandons the system for any reason. A surety bond or securitization obligation are examples of solar energy system or facility shall provide and maintain with the Town Clerk with a current in force certificate of insurance showing that the property has sufficient liability coverage pursuant to industry standards.
12. Upon request of the appropriate Fire Chief having jurisdiction, the owner or operator shall cooperate with local emergency services in developing an emergency response plan.
13. A Property Maintenance and Operating Plan is required for all large scale solar energy systems and solar energy facilities. This plan must be written and describe continuing system and facility maintenance and property upkeep such as mowing and trimming. This plan must be submitted for review by the Planning Board as part of the site plan review process.

SECTION 9 SMALL SCALE WIND ENERGY SYSTEM:

- A. Small scale wind energy systems are permitted only in RA, R3, L1 and IR Zoning Districts with site plan review.
- B. Wind energy systems except those exempted in section 5 II B 1 above may not be attached to a structure other than a tower rated specifically for such use.
- C. Wind energy systems are not permitted in any front yard and must be sited entirely behind the front building line of the principal building on the lot.
- D. A landscaped buffer may need to be provided around some or all of the wind energy system.
- E. No existing structure shall be modified to serve as a wind energy system tower unless in conformity with this local law.
- F. No existing tower shall be retrofitted to support a new wind energy system without the certification by a licensed New York State Engineer confirming the inspection of and the structural integrity of the existing tower.
- G. Every installation of a small scale wind energy system shall maintain a fall zone equal to or greater than the combined height at the tallest point of the tower and all generator components including the blades plus 10 feet. No structures, easements, right-of-way, public sidewalks or roadways, or above ground utility lines shall be present in the fall zone.
- H. The setback for the edge of the fall zone and all wind energy facility components is subject to the requirements of the zoning requirements of the underlying zone in which situate. In the event that

more than one zone's regulations may apply, the more restrictive requirements shall apply.

I. Total height of wind energy system towers and components shall not exceed 200'.

J. For all above ground utility lines located within the proposed fall zone, a letter of permission from the associated utility company is required.

K. Noise attributable to a small scale wind energy system cannot exceed 42 dBA during daytime hours (6am-10pm) and 35 dBA during nighttime hours (10pm-6am) at the nearest outside wall of a nonparticipating residence or occupied community building. Short term (15 minute maximum) maximum noise levels shall not exceed 50dBA. In the event audible noise due to wind energy system operations contains a steady pure tone, the owner shall promptly take corrective action to permanently eliminate the noise. An owner of a nonparticipating residence or occupied community building may waive noise limit requirements with a written Mitigation Waiver agreement. A manufacturer's proof of 3rd party certification of noise levels to the latest AWEA (American Wind Energy Association) published standard at the time of application showing sound level testing that meets the above criteria shall be accepted as noise design compliance for permitting, installation and operating purposes.

SECTION 10 LARGE SCALE WIND ENERGY SYSTEM:

A. No large scale wind energy facilities shall hereafter be used, erected, modified, or reconstructed except after the granting of a Special Use Permit and Site Plan approval by the Lansing Planning Board and in conformity with the Town's Land Use Ordinance and the provisions of this local law.

B. No existing structure shall be modified to serve as a wind energy system tower unless in conformity with this local law.

C. In reviewing any applications for any allowed or new large scale wind energy facilities or tower(s), the Planning Board shall, at a minimum, require that the following application materials and information be submitted for review and, if appropriate, approved, and that the following review and approval standards and criteria be met:

1. Site Location. A proposed site location shall receive approval from the Planning Board following satisfaction of the following requirements:
 - a. Documentation of the need for the use of the site proposed, including an analysis demonstrating that proposed location is necessary to achieve the optimal energy production practicable.
 - b. Analyses and studies by NYS certified structural engineers showing adequate design and construction parameters for any proposed large scale wind energy facilities, including calculations and a demonstration that the strength and capacity of the same and all towers are designed to exceed the loading expected and calculated for such large scale wind energy facility or tower at such location and elevation, including static loading, wind loading, and snow loading.
2. Site Plan and Special Permit Applications. All Site Plans shall require the seal of a New York State licensed Professional Engineer, and all facilities shall meet applicable NYS code requirements including the applicable safety and other requirements of NFPA, ANSI, IEEE and related national code agencies. A fully completed Special Permit Application and Site Plan prepared to scale in sufficient detail and accuracy shall be provided, and such Site Plan and completed application shall show at a minimum:
 - a. The exact location of the proposed tower, together with any guy wires and anchors, if

applicable, and a side elevation of the tower showing the proposed wind generator and any other tower mounted equipment.

- b. The maximum height of the proposed tower and all mounted equipment.
- c. A detail of tower type (monopole, guyed, latticed, freestanding, or other) including any appendages, and further including design parameters and mapping for all sub-surface improvements.
- d. The location, type and intensity of any lighting on the property, together with a description of all FAA or other lighting requirements, including verification of such description and disclosure by an appropriate qualified engineer, or from the FAA or other authority having jurisdiction, and including a reference to the statute, regulations, design manuals (or similar authoritative source of such requirements) that shows what lighting requirements are required for the particular large scale wind energy facilities and towers.
- e. Property boundaries, tax map numbers, street addresses and names of owners of adjacent properties.
- f. Proof of landowner's consent if the applicant does not own the property and a map or other document delineating the scope of any lease or easement allowing or relating to the siting of any improvements or facilities, together with a depiction and description of the access provided to the site.
- g. The location of all other structures on the property and all structures on any adjacent property within 1,000 feet of the property lines, together with the distance from those structures to any proposed tower.
- h. The location, nature and extent of any proposed fencing, landscaping, and screening, together with final grading plans for all facilities and roads, and further including planting plans, access roads, parking areas, and all proposed buildings or structures and their appurtenances.
- i. The location and nature of proposed utility easements and access road, if applicable, including a depiction and description of any above-ground utilities and mapping for all underground utilities, the location, size, and operational parameters of any on-site generators, and the source of any power supplied to the site.
- j. All information regarding the tower, wind generator and any associated equipment prepared by the manufacturer of the tower or antenna or the applicant, including but not limited to the following:
 - i. The make and model of the tower and equipment to be mounted to it.
 - ii. The manufacturer's design data for installation instructions and construction plans.
 - iii. The applicant's proposed tower maintenance and inspection procedures and records system.

- iv. Identification of any anti-climb device(s) to be installed.
- v. Confirmation that the wind energy generator to be mounted on the tower will be operated at or below noise levels allowed by this law.

k. All proposed signage, provided that no tower or large scale wind energy facilities shall contain any advertising signs or advertising devices except signage identifying a health or general welfare message and the owner(s) name and contact information, both being solely intended for identification and the protection of the general public.

l. Certification by a licensed New York State structural engineer confirming the structural integrity of the tower design.

3. Height. The Planning Board shall approve the combined height of each proposed tower and wind energy generator which shall in no case exceed 200' tall as measured from the average elevation of surrounding terrain (and no buildup of a base or foundation shall increase such allowed height) to the highest point of the tower, wind generator, turbine blades, or other devices extending above the structure of the tower. In reviewing such issue the Planning Board shall consider the minimum height necessary for the applicant's needs.

4. Fall Zones. The applicant must demonstrate a safe fall zone around the tower showing no impacts upon structures or dwellings and adequate setbacks from public highways. The radius of such zone must be at least equal to the highest point of the tower and its wind energy generation facilities, as measured from the lowest ground-level grade within such height radius, plus 10 feet.

5. Setbacks; Yardage. All large scale wind energy facilities shall comply with all setback, frontage, minimum lot size, maximum lot coverage, yardage, and bulk requirements of the underlying zone in which situate. In the event more than one zone's regulations may apply, the more restrictive requirements shall be applied upon a standard-by-standard basis. These standards apply to all major structures of any large wind energy facility, as well as their supporting parts and appurtenances, such as guy wires, anchors, and accessory structures. In order to safeguard the general public and adjacent properties, all towers shall be set back from all adjacent property lines a sufficient distance to contain on site substantially all ice fall or debris from any tower or wind energy generator or associated equipment failure.

6. Subdivision. No subdivision for the purposes of the present or future siting or emplacement of any large scale wind energy system or tower shall be reviewed as, or classified as, an exempt subdivision under the town's subdivision local law (as exists or as hereafter amended). In the event any subdivision application is submitted or any approval sought for any present, proposed, or future large scale wind energy facilities, then each and all such lots shall meet the minimum lot sizes for the applicable district and all lots upon which any large scale wind energy facilities are proposed, or upon which such large scale wind energy facilities, shall be sited shall be sufficiently sized and shaped to incorporate the entire fall zone within and upon such single lot. In the event this single lot requirement is impossible to, then maximum compliance with this requirement shall be sought and any area of the fall zone not located upon such lot shall be subject to an express easement in a form as approved by the Town.

7. Aesthetics. Large scale wind energy facilities shall be located and their visual effects

minimized through careful design and buffering via vegetative screening to the maximum extent which is practical and feasible to help ensure compatibility with surrounding land uses. The following provisions shall serve as guidelines or examples for the Planning Board in considering how to screen towers:

- a. Native plants and vegetation consistent with surrounding flora is recommended.
- b. To screen the base of the tower and accessory structures, a row of deciduous trees or other plants capable of forming a continuous hedge at 10' height in two years of planting located within 25 feet of the tower base and accessory structures shall be recommended, together with other landscaping or buffering as the Planning Board shall reasonably require.
- c. Within 50 feet of the property boundaries, at least one row of evergreen trees, shrubs or other landscaping or buffering as the Planning Board shall reasonably require, at least four feet high when planted and not spaced more than 20 feet apart for trees, and a lesser and species specific appropriate amount for shrubs or hedges.
- d. All trees, plantings, and landscaping shall be maintained and replaced if needed.
- e. Existing on-site vegetation shall be preserved to the maximum extent possible.
- f. The Planning Board may require that the tower and wind energy generator be designed and sited so as to avoid, if possible, application of FAA lighting and painting requirements, it being generally understood that towers should not be artificially lighted except as required by the FAA, or when public safety so requires.
- g. The tower and shall be of a non-reflective galvanized finish or painted matte grey unless otherwise required by the FAA, and Accessory structures should maximize use of build materials, colors and textures designed to blend with the natural surroundings including by the use of camouflaging, where appropriate.
- h. All communication cable and utilities including water, gas, electric, telephone, fiber optic and data lines and sewer leading to and away from any large scale wind energy facility or tower shall be installed underground.

8. Visual EAF. The applicant shall submit a visual environmental assessment form (visual EAF) and landscaping plan addressing other standards listed within this local law, paying particular attention to visibility from key viewpoints within and outside of the municipality as identified in the visual EAF. The applicant will also be required to undertake a visual impact assessment with shall include:

- a. A description of how the facilities can be blended with the area view, including any plans for camouflage, including but not limited to simulating the appearance of a tree or other structure depending on the particular context of the proposed location.
- b. A Zone of Visibility Map shall be provided in order to determine locations where the tower and generator components may be seen.

c. Pictorial representations of “before and after” views from key viewpoints both inside and outside the Town, including but not limited to public highways, local parks, identified important area views or historic properties and sites, other vistas known to be important to the community, and from any other location where the site is visible to a large number of visitors or residents. The Planning Board may determine appropriate key sites at a pre-submission conference with the applicant or upon and after receipt of an application.

d. Assessment of the visual impact of the tower base, guy wires, accessory buildings, and accessory structures from abutting properties and streets, and on area views known to be important to the community.

9. Traffic Access and Safety.

a. Access standards may be imposed or required to assure adequate emergency and service access. Maximum use of existing roads, public or private, shall be made. Construction of pervious roadways (crushed stone, gravel, etc.) is preferred and shall be permitted notwithstanding underlying zoning district regulations which may provide otherwise. Road construction shall, at all times, minimize ground disturbance and vegetation cutting, and road grades shall closely follow natural contours to assure minimal visual disturbance and reduce potential soil erosion.

b. All towers and guy anchors, if applicable, shall be enclosed by a climb-proof fence not less than eight feet in height and otherwise sufficiently secured to prevent and protect wind energy facilities from trespassing or vandalism. All security measures and devices shall be identified, including motion sensing lights, camera systems, lock boxes, and emergency notification systems.

10. Agricultural Data Statement and Notice of Intent. If required, an Agricultural Data Statement shall be submitted, and if the tower or wind energy facilities are located within, contiguous to, or within a specified distance of an Agricultural District mapped by Tompkins County and recognized by the State of New York, Department of Agriculture and Markets, then the applicant shall also be required to file a Notice of Internet and to supply the Town with all documents, communications and information submitted, together with any replies received from, New York State or the Department of Agriculture and Markets.

11. Emergency Response Plan and Removal. The applicant shall submit any required emergency response plan, if requested by the Planning Board. Additionally, the applicant shall be required to identify the manner in or by which the obligation to remove the tower or wind energy facilities will be securitized, whether by letter of credit, bonding, escrow deposit or otherwise. Any such proposed form of security shall provide detailed calculations supporting the amount of removal costs to be secured, taking into account a reasonable rate of inflation over the proposed useful life of the project. Such calculations shall be sealed by an engineer licensed in New York State. In no case may any removal or related performance bond be issued upon, in conjunction with, or as secured or underwritten upon a direct or indirect indemnity agreement supplied by the applicant or the present or future owner of such tower or wind energy facility, or any lessor user thereof. Additional requirements for bonding and removal

obligations appear elsewhere in this law.

12. Indemnity Agreement. The form of the proposed indemnity and hold harmless agreement shall be submitted for approval and the same shall be approved by the Town Board as to form and content.

13. Noise or Sound Generation.

A. Large scale wind energy systems shall meet the following minimum spacing requirements to address noise mitigation:

i. Distance from currently occupied off-site residences, business and public buildings shall be not less than one thousand one hundred and fifty (1,150) feet. Distance from the residence of the landowner on whose property the tower(s) are erected shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater. For the purposes of this section only, the term “business” does not include agricultural uses.

ii. Distance from right-of-way (ROW) of public roads shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater.

iii. Distance from any property line shall be not less than five hundred (500) feet or one point one (1.1) times the system height, whichever is greater, unless appropriate easement has been obtained from adjoining property owner.

B. Large scale wind energy systems shall meet the following noise measurement requirements to address noise mitigation:

i. Noise attributable to a large scale wind energy system cannot exceed 42 dBA during daytime hours (6am-10pm) and 35 dBA during nighttime hours (10pm-6am) at the nearest outside wall of a nonparticipating residence or occupied community building. Short term (15 minute maximum) maximum noise levels shall not exceed 50dBA. In the event audible noise due to wind energy system operations contains a steady pure tone, the owner shall promptly take corrective action to permanently eliminate the noise. If there is noise from a transformer substation, the proponent must add 5 dBA to the values predicted by the noise model, to account for the tonal characteristic of transformer substation noise.

ii. Starting within 12 months after the date when the WEF is operating, a post-construction sound study shall be performed. Post-construction sound measurements shall be repeated every three (3) years throughout the life of the facility. The applicant may seek a waiver from the Town of all but the first post-construction measurements if no valid noise complaints are received during the previous 3 year period. Two permanently mounted sound meters, with data loggers must be placed at the property line of two most impacted abutters. The operator must hire a third party to do verification measurements. Modeling and analysis shall conform to the most current version of IEC 61400 and ISO 9613 published standards. After installation of the large wind energy system, sound pressure level measurements shall be done by a third party,

qualified professional according to the procedures in the most current version of ANSI S12.18. All sound pressure levels shall be measured with a sound meter that meets or exceeds the most current version of ANSI S1.4 specifications for a Type II sound meter.

SECTION 11 ABANDONMENT AND DECOMMISSIONING PLAN:

- A. All applications for a large scale solar energy system, solar energy facility, large scale wind energy system or wind energy facility shall be accompanied by a written decommissioning plan to be implemented upon abandonment or cessation of activity or in conjunction with removal of the facility. This plan must be submitted for review by the Planning Board as part of the site plan review process.
- B. In the event the large scale solar energy system, solar energy facility large scale wind energy system or wind energy facility is not completed and functioning within 27 months of the issuance of final site plan approval, the Town may notify the operator or owner to implement the decommissioning plan. The decommissioning plan must be completed within 270 days of notification by the town.
- C. The decommissioning plan must ensure the site will be restored to a useful, nonhazardous condition without delay, including but not limited to the following:
1. Removal of above ground and below ground equipment, structures and foundations.
 2. Restoration of the surface grade and soil after removal of equipment.
 3. Revegetation of restored soil areas with native seed mixes, excluding all invasive species.
 4. The plan shall include a time frame for the completion of site restoration work.
- D. Upon cessation of activity of a constructed facility for a period of one year, the owner or operator shall implement the decommissioning plan.
- E. If the owner or operator fails to fully implement and complete the decommissioning plan within 270 days of notification by the Town, the Town may, at its discretion, provide for the restoration of the site in accordance with the decommissioning plan. The cost incurred by the Town shall be assessed against the property, shall become a lien and tax upon the property and shall be enforced and collected with interest by the same officer and in the same manner as other taxes.

SECTION 12 INSPECTIONS AND ENFORCEMENT:

- A. The Town's Code Enforcement Officer is authorized to investigate any non-compliance (or complaints of such violation of non-compliance) within the requirements of this local law, to issue appearance tickets for any violation of this local law or any permit or approval requirements or conditions, to recommend the commencement of civil enforcement or related proceedings to the Town Board, and to order in writing the remedying of any condition or activity found to exist in, on, or about any large or small scale solar energy system and facility in violation of this local law. Upon finding that any such violation exists, the Code Enforcement Officer may issue a Compliance Order, which Compliance Order shall comply with the requirements of Executive Law section 382 and served accordingly. The person so served shall come into compliance with this local law within the specified period of time as set forth in the Compliance Order and any failure to do so shall be a violation of this local law. Any failure to comply with the terms and requirements of this local law, or the requirements and conditions of any permit or approval issued hereunder, is hereby also declared to be a violation of this local law. All violations of this local law are hereby declared to be illegal and subject to civil penalties and criminal sanctions as herein set forth.
- B. All provisions of New York law generally applicable to misdemeanors shall apply to any criminal proceeding brought under this local law and each such misdemeanor shall be an unclassified misdemeanor. The following civil penalties and criminal fines and sanctions shall apply to violations of this local law:
1. First Violation: Any person that violates any of the provisions of this local law shall be

(I) guilty of an unclassified misdemeanor and subject to a fine of not more than \$1,500.00 or (ii) subject to a civil penalty of not more than \$2,500.00 to be recovered by the Town in a civil action. Every such person shall be deemed guilty of a separate offense for each week that such violation, disobedience, omission, neglect or refusal shall continue. Similarly, a separate civil penalty shall apply and be assessable for each week that such violation, disobedience, omission, neglect, or refusal shall continue.

2. Second Violation: Any violation that is found to have occurred within 2 years of any prior civil or criminal determination of any other violation of this local law shall be (i) guilty of an unclassified misdemeanor and subject to a fine of not more than \$2,500.00 or (ii) subject to a civil penalty of not more than \$5,000.00 to be recovered by the Town in a civil action. Every such person shall be deemed guilty of a separate offense for each week that such violation, disobedience, omission, neglect or refusal shall continue. Similarly, a separate civil penalty shall apply and be assessable for each week that such violation, disobedience, omission, neglect, or refusal shall continue.

C. An action or proceeding may be instituted in the name of the Town in any court of competent jurisdiction to prevent, restrain, enjoin, correct, enforce, or abate any violation of, or nonconformance with, any provision or requirement of this local law or the terms and conditions set forth in any permit or approval issued hereunder. In any such proceeding the Town shall not be required to: (I) prove the lack of an adequate remedy at law, or (ii) to post a bond or other undertaking as a condition or requirement for any preliminary, interim, or permanent restraining order or injunction. No such action or proceeding shall be commenced without the appropriate authorization from the Town Board.

D. For purposes of this local law the Justice Court of the Town is hereby vested and imbued with jurisdiction to: (I) issue administrative or other warrants in compliance with the New York Criminal Procedure Law and administrative Codes of the State of New York, and (ii) to hear and adjudicate allegations relating to the criminal or civil violation of this local law and to thereafter, if appropriate, impose any fine, penalty or sanction. All criminal matters arising under this law shall be and deemed unclassified misdemeanors, including for purposes of jurisdiction.

E. No remedy or penalty specified in this local law shall be the exclusive remedy available to the Town to address and violation of, or non-compliance with, the requirements of this local law. The rights and remedies of the Town are independent of each other and cumulative. The grant of any right or remedy in this local law is in addition to, and not in limitation of or substitution for, any other right or remedy of the Town, whether sounding in law, equity or admiralty. Further, the election by the Town of any one right or remedy does not forestall or prevent the simultaneous or future election of any other right or remedy.

SECTION 13 VALIDITY:

The invalidity of any section or provision of this Law shall not invalidate any other section or provision thereof.

SECTION 14 EFFECTIVE DATE:

This Law shall take effect upon filing with the Secretary of State of New York.