TOWN OF MARCELLUS LOCAL LAW NO. D-2024

A LOCAL LAW TO AMEND SECTION 235-26M OF THE TOWN OF MARCELLUS CODE TO ADD A NEW SECTION REGULATING SOLAR ENERGY SYSTEMS WITHIN THE TOWN OF MARCELLUS

BE IT ENACTED by the Town Board of the Town of Marcellus as follows:

SECTION 1. PURPOSE AND INTENT.

The purpose of this Local Law is to amend Section 235-26M of the Town of Marcellus Code pertaining to the regulation of solar energy systems within the Town of Marcellus and to regulate the construction of solar energy systems in the Town Marcellus in a manner that preserves the health, safety and welfare of the Town while also facilitating the production of renewable energy.

SECTION 2. AUTHORITY.

This Local Law is enacted pursuant to the New York State Constitution and New York Municipal Home Rule Law §10.

SECTION 3. REPEAL OF SECTION 235-26M OF THE TOWN OF MARCELLUS ZONING REGULATIONS

Section 235-26M of the Town of Marcellus Zoning Regulations is hereby repealed in its entirety.

SECTION 4. AMENDMENT OF SECTION 235-26M OF THE TOWN OF MARCELLUS CODE TO ADD A NEW SECTION 235-26M TITLED "SOLAR ENERGY SYSTEMS."

"SECTION 235-26M SOLAR ENERGY SYSTEMS.

(1) Purpose and intent.

The Town of Marcellus recognizes that solar energy is a clean, readily available and renewable energy source. Development of solar energy systems offers an energy source that can prevent fossil fuel emissions, reduce the Town's energy demands and attract and promote green business development within the Town. The Town of Marcellus has determined that comprehensive regulations regarding the development of solar energy systems are necessary to protect the interests of the Town, its residents, and businesses. This Section is intended to promote the effective and efficient use of solar energy systems; establish provisions for the placement, design, construction, operation and removal of such systems in order to uphold the public health, safety and welfare, promote the co-location of solar energy systems within active farming and agricultural lands in a manner that preserves the rural character of the Town of Marcellus; to ensure that such systems will not have a significant adverse impact on the aesthetic qualities and maintain

the rural character of the Town. The Town, when appropriate, will promote the location of smaller commercial solar projects in multiple locations to further mitigate impacts from such larger projects. Further, the Town of Marcellus wishes to enhance agricultural viability within the Town and preserve productive agricultural land resources, mitigate the impacts of solar energy systems on environmental resources such as prime farmlands, prime soils (including USDA Prime Soils), prime soil lands, Farmland of Statewide Importance, other important agricultural lands, forests, wildlife, and other protected resources. This Section also recognizes that such uses in the Town may, in some instances, represent large disturbances of lands, the hosting of complex equipment and the need to assure that such projects and property are removed or disposed of at the time of the discontinuance, while minimizing impacts to local roads and nearby property values and avoiding financial burdens on taxpayers.

(2) Applicability.

This Section shall apply to all solar energy systems (including solar heating panels) in the Town of Marcellus which are installed or modified after the effective date of this Section. All solar energy systems which are installed or modified after the effective date of this Section shall be in compliance with all of the provisions hereof. Any proposed solar energy system subject to review by the New York State Board on Electric Generation Siting and the Environment pursuant to Section 10 of the New York State Public Service Law, or the Office of Renewable Energy Siting pursuant to Section 94-c of the New York State Executive Law or any subsequent law, shall be subject to all substantive provisions of this Section and any other applicable provisions of the Town of Marcellus Zoning Regulations and applicable local laws.

(3) Definitions.

As used in this Section, the following terms shall have the meanings indicated:

ALTERNATING CURRENT (AC) - An electric current that reverses direction at regular intervals, having a magnitude that varies continuously in sinusoidal manner.

ATTERBERG LIMITS AND FIELD TESTS - A basic measure of the critical water contents of a fine-grained soil and its shrinkage limit, plastic limit, and liquid limit. Establishes the moisture contents at which fine-grained clay and silt soils transition between solid, semi-solid, plastic, and liquid states.

COMMERCIAL SOLAR PROJECT - A solar energy system or collection of solar energy systems or area of land principally used to convert solar energy to electricity, whether by photovoltaics, concentrating solar thermal devices or various experimental solar technologies, with the primary purpose of supplying electricity to a utility grid for wholesale or retail sales of electricity to the general public or utility provider.

COMMUNITY SOLAR PROJECT - Proposed commercial solar projects sited in the Town of Marcellus that will feature the ability to participate in subscriptions for lower electricity costs to Town residents.

DIRECT CURRENT - An electric current of constant direction, having a magnitude that does not vary or varies only slightly.

ENVIRONMENTAL MANAGER (EM) - An individual possessing the skills and knowledge to effectively develop a site for use as a solar PV system and then reclaim the site restoring it, to the greatest extent practical, to its original use.

FARMLAND OF STATEWIDE IMPORTANCE - Land, designated as "Farmland of Statewide Importance" in the U. S. Department of Agriculture Natural Resources Conservation Service's (NRCS) Soil Survey Geographic (SSURGO) Database on Web Soil Survey, and/or pursuant to the New York State classification system for Onondaga County, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed. Farmland of Statewide Importance may include tracts of land that have been designated for agriculture by New York State.

HOST COMMUNITY AGREEMENT - A contract between a developer and a local governing body, whereby the developer agrees to provide the community with certain negotiated benefits and mitigate specified impacts of the solar project.

IMPORTANT BIRD AREA ("IBA") - An area determined by the New York Audubon to meet 1 of 3 criteria: (1) a place where birds congregate in large numbers at one time; (2) a place for species that are at-risk; and/or (3) a place that supports groups of birds representing certain habitats such as forests, wetlands, grasslands and shrublands.

KILOWATT (**kW**) - A unit of electrical power equal to 1,000 watts, which constitutes the basic unit of electrical demand. A watt is a metric measurement of power (not energy) and is the rate (not the duration) at which electricity is used; 1,000 kW is equal to one megawatt (MW).

MEGAWATT (**MW**) - A unit of electrical power equal to 1,000 kilowatts, which constitutes a unit of electrical demand.

NATIVE PERENNIAL VEGETATION - Native wildflowers 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.

NET-METERING - A billing arrangement that allows solar customers to receive credit for excess electricity which is generated from the customer's solar energy system and delivered back to the grid so that customers only pay for their net electricity usage for the applicable billing period.

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

PRIME FARMLAND, PRIME SOILS, AND PRIME SOIL LANDS - Soils and land that are best suited for producing food, feed, forage, fiber, and oilseed crops, and must be available for this use. Such soils have the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crop when it is treated and managed according to acceptable farming methods. Prime Farmland may now be in crops, pasture, woodland, or other land, but not in urban and built-up land or water areas.

QUALIFIED SOLAR INSTALLER - A person who has skills and knowledge related to the construction and operation of solar energy systems (and the components thereof) and installations

and has received safety training on the hazards involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not on NYSERDA's list of eligible installers or NABCEP's list of certified installers may be deemed to be qualified solar installers if the Town Code Enforcement Officer or such other Town officer or employee as the Town Board designates determines such persons have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of exposed live parts.

SOLAR ACCESS - Space open to the sun and clear of overhangs or shade, including the orientation of streets and lots to the sun so as to permit the use of active and/or passive solar energy systems on individual properties.

SOLAR COLLECTOR - A solar photovoltaic cell, panel, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.

SOLAR ENERGY SYSTEM - A complete system of solar collectors, panels, controls, energy devices, heat pumps, heat exchangers, and other materials, hardware or equipment necessary to the process by which solar radiation is collected and converted into another form of energy, including but not limited to thermal and electrical, stored and protected from dissipation and distributed. For purposes of this Section, a solar energy system does not include any solar energy system of four square feet in size or less.

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM - A solar energy system incorporated into and becoming part of the overall architecture, design and structure of a building in manner that the solar energy system is a permanent and integral part of the building structure.

FLUSH-MOUNTED SOLAR ENERGY SYSTEM - A rooftop-mounted solar energy system with solar panels which are installed flush to the surface of a roof and which cannot be angled or raised.

GROUND-MOUNTED SOLAR ENERGY SYSTEM - A solar energy system that is affixed to the ground either directly or by mounting devices and which is not attached or affixed to a building or structure.

ROOFTOP-MOUNTED SOLAR ENERGY SYSTEM - A solar energy system in which solar collectors/panels are mounted on the roof of a building or structure either as a flush-mounted system or as panels fixed to frames which can be tilted to maximize solar collection. Rooftop-mounted solar energy systems shall be wholly contained within the limits of the building's or structure's roof surface.

SOLAR PANEL - A device which converts solar energy into electricity and/or heat.

SOLAR SKYSPACE - The space between a solar energy system and the sun through which solar radiation passes.

SOLAR STORAGE BATTERY - A device that stores energy from the sun and makes it available in an electrical form.

(4) Building-integrated solar energy systems.

- A. Districts where allowed. Building-integrated solar energy systems shall be permitted in all zoning districts within the Town subject to the submission of, application for and review and issuance of an applicable building permit.
- B. Building-integrated solar energy systems shall be subject to the general requirements set forth at Section (7).

(5) Rooftop-mounted solar energy systems.

- A. Districts where allowed. Rooftop-mounted solar energy systems shall be permitted in all zoning districts within the Town subject to the following requirements:
 - (1) A building permit shall be required for installation of all rooftop-mounted solar energy systems.
 - (2) Rooftop-mounted solar energy systems shall not exceed the maximum allowed height of the principal use in the zoning district in which the system is located and shall specifically prohibit solar racking systems extending from the roof surface more than 12 inches when measured from average grade of roof surface at maximum height.
 - (3) Rooftop-Mounted Solar Energy Systems shall be mounted parallel to the roof plane on which they are mounted. However, in the case of buildings which have a flat roof, a tilted mount may be permitted subject to site plan review before the Planning Board.
 - (4) In order to ensure firefighter and other emergency responder safety, except in the case of accessory buildings under 1,000 square feet in area, there shall be a minimum perimeter area around the edge of the roof and structurally supported pathways to provide space on the roof for walking around all rooftop-mounted solar energy systems. Additionally, installations shall provide for adequate access and spacing in order to:
 - (a) Ensure access to the roof.
 - (b) Provide pathways to specific areas of the roof.
 - (c) Provide for smoke ventilation opportunity areas.
 - (d) Provide for emergency egress from the roof.

- (e) Exceptions to these requirements may be requested where access, pathway or ventilation requirements are reduced due to:
 - [1] Unique site specific limitations;
 - [2] Alternative access opportunities (such as from adjoining roofs);
 - [3] Ground level access to the roof area in question;
 - [4] Other adequate ventilation opportunities when approved by the Codes Office;
 - [5] Adequate ventilation opportunities afforded by panels setback from other rooftop equipment (for example: shading or structural constraints may leave significant areas open for ventilation near HVAC equipment);
 - [6] Automatic ventilation devices; or
 - [7] New technology, methods or other innovations that ensure adequate emergency responder access, pathways and ventilation opportunities.
- (f) In the event any of the standards in this Subsection (A)(3) are more stringent than the New York State Uniform Fire Prevention and Building Code, they shall be deemed to be installation guidelines only and the standards of the Code shall apply.
- B. Rooftop-mounted solar energy systems shall be subject to the general requirements set forth at Section (7).
- C. On structures having significant architectural features as defined by the U.S. Department of Interior, all installations will conform to the Secretary of the Interior's Standards for Rehabilitation of historical structures. Locational placement of such panels shall be made such that there is no direct adverse effect or visual impact on any significant architectural features. Destruction or alteration of historic or architecturally significant features or materials that characterize the structure shall be prohibited.
- D. Permit application requirements for roof-top mounted solar energy systems.
 - (1) In addition to the requirements specified in Section (5) (A)-(B), an applicant must submit the following materials to the Code Enforcement Officer:
 - (a) A site plan showing location of major components of the solar energy system and other equipment on the roof or legal accessory structure. This plan should represent relative locations of

components at the site, including, but not limited to, location of arrays, existing electrical service locations, utility meters, inverter locations, system orientation and tilt angles. This plan should show access and pathways that are compliant with New York State Uniform Fire Prevention and Building Code, if applicable.

- (b) One-line or three-line electrical diagram. The electrical diagram required by NYSERDA for an incentive application and/or utilities for an interconnection agreement may also be provided here.
- (c) Specification sheets for all manufactured components. If these sheets are available electronically, a web address will be accepted in place of an attachment, at the discretion of the Town.
- (d) All diagrams and plans must be prepared by a professional engineer or registered architect as required by New York State law and include the following:
 - [1] Project address, section, block and lot number of the property;
 - [2] Owner's name, address and phone number;
 - [3] Name, address and phone number of the person preparing the plans; and
 - [4] System capacity in kW-DC.

(6) Ground-mounted solar energy systems.

- A. Districts where allowed. Ground-mounted solar energy systems are permitted as accessory structures in all Zoning Districts within the Town subject to the granting of site plan approval by the Planning Board and further subject to the following requirements:
 - (1) A building permit and site plan approval shall be required for installation of all Ground-Mounted Solar Energy Systems.
 - (2) Ground-mounted solar energy systems are only permitted as an accessory use on parcels of land with a minimum lot size of 3 acres.
 - (3) Ground-Mounted Solar Energy Systems are prohibited in front yards. For purposes of this Section, a corner lot shall be considered to have a front yard on each street frontage. Ground-mounted solar energy systems shall be situated with a minimum side yard setback of 25 feet and a rear yard minimum setback of 35 feet. Further setbacks, area and yard requirements and total area/lot coverage restrictions may be required by the Planning Board in order to protect the public's safety, health and welfare. To the

- extent the provisions of this Section conflict with any other provision of the Town of Marcellus Zoning Regulations, the provisions of this Section shall apply.
- (4) The height of the solar collector/panel and any mounts shall not exceed 15 feet in height when oriented at maximum tilt measured from the ground (average grade) and including any base. Ground-mounted Solar Energy Systems shall be fixed angle installations.
- (5) A Ground-Mounted Solar Energy System shall be screened when possible and practicable from adjoining lots and street rights-of-way through the use of architectural features, earth berms, landscaping, fencing or other screening which will harmonize with the character of the property and the surrounding area. The proposed screening shall not interfere with the normal operation of the solar collectors/panels.
- (6) The Ground-Mounted Solar Energy System shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading of property to the north, while still providing adequate solar access for the Solar Energy System.
- (7) Neither the Ground-Mounted Solar Energy System nor any component thereof shall be sited within any required buffer area, easement, right-of-way or setback.
- (8) The criteria for site plan as set forth in Section 235-28 of the Town of Marcellus Zoning Regulations shall also be demonstrated for each application.
- (9) The Town Planning Board shall have the discretion to require that a Glare Study be performed of the proposed ground-mounted solar energy system.
- B. Ground-mounted solar energy systems shall be subject to the general requirements set forth in Section (7).

(7) General requirements applicable to all solar energy systems.

- A. All solar energy system installations must be performed by a qualified solar installer.
- B. Solar energy systems, unless part of a commercial solar project, shall be permitted only to provide power for use by owners, lessees, tenants, residents or other occupants of the premises on which they are erected, but nothing contained in this provision shall be construed to prohibit the sale of excess power through a netmetering arrangement in accordance with New York Public Service Law §66-j or similar state or federal statute. However, solar energy system applications in a residential setting and serving a residential use on a single parcel or lot shall be limited to 35 kW but not to exceed 110% of energy anticipated to be consumed on

the site in the next 12 months. Solar energy system applications serving an associated commercial or industrial use shall not exceed 110% of the energy anticipated to be consumed on the site in the next 12 months. The applicant shall be responsible for demonstrating the anticipated energy usage.

- C. Prior to operation, electrical connections must be inspected by a Town Code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town. The electrical components and connections shall be in compliance with the most recently adopted National Electric Code (NEC) standards.
- D. Any connection to the public utility grid must be inspected by the appropriate public utility and proof of inspection shall be provided to the Town.
- E. Solar energy systems shall be maintained in good working order.
- F. Solar energy systems shall be permitted only if they are determined by the Town to be consistent in size and use with the character of surrounding neighborhood.
- G. Solar energy systems shall be permitted only if they are determined by the Town not to present any unreasonable safety risks, including but not limited to:
 - (1) Weight load;
 - (2) Wind resistance; and
 - (3) Ingress or egress in the event of fire or other emergency.
- H. All solar energy systems described in this Section shall meet and comply with all relevant and applicable provisions of the New York State Uniform Fire Prevention and Building Code Standards. To the extent the provisions of the New York State Uniform Fire Prevention and Building Code are more restrictive than the provisions set forth in this Section, the provisions of the New York State Uniform Fire Prevention and Building Code shall control.
- I. The application for any solar energy system shall specifically recite the use or nonuse of solar storage batteries, their placement, capacity, and compliance with all existing New York State and Federal rules and regulations. If solar storage batteries are included as part of the solar energy system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Uniform Fire Prevention and Building Code when in use and when no longer used shall be disposed of in accordance with any existing laws and regulations of the Town and other applicable laws and regulations.
- J. All utility services and electrical wiring/lines shall be placed underground and otherwise be placed within the walls or unobtrusive conduit. No conduits or feeds may be laid on the roof. Feeds to the inverter shall run within the building and penetrate the roof at the solar panel location.

- K. If a solar energy system ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall completely remove the system, mount and all other associated equipment and components by no later than 90 days after the end of the twelve-month period or within 10 days of written notice from the Town.
- L. To the extent practicable, solar energy systems shall have neutral paint colors, materials and textures to achieve visual harmony with the surrounding area.
- M. The design, construction, operation and maintenance of the solar energy system shall prevent the direction, misdirection and/or reflection of solar rays onto neighboring properties, public roads, public parks and public buildings. All panels and supporting structures shall utilize materials and colors that are non-reflective in nature.

N. Marking of equipment.

- (1) Solar energy systems and components shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the solar electric system. Materials used for marking shall be weather- resistant. For residential applications, the marking may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover.
- (2) In the event any of the standards in this subsection for markings are more stringent than applicable provisions of the New York State Uniform Fire Prevention and Building Code, they shall be deemed to be guidelines only and the standards of the State Code shall apply.
- O. Prior to the time of the issuance of a solar building or construction permit, the applicant/owner shall demonstrate to the Town Code Enforcement Officer a reliable and safe master method for the deenergizing of the solar energy system in the event of an emergency. The method and location to de-energize the Solar Energy System, once approved by the Code Enforcement Officer, shall be provided by the applicant to all applicable emergency services and first responders, including, but not limited to, the Town of Marcellus Fire Department, MAVES, the Village of Marcellus Police Department, the New York State Police, and the Onondaga County Sheriff's Department.
- P. For applications requiring screening, the applicant may be encouraged to incorporate plantings that balance the need for screening against the impacts of shading. Applicant should propose a balanced planting plan to allow for the most protected energy efficiency.

(8) Commercial Solar Projects.

- A. <u>Districts where allowed</u>. Subject to the issuance of a special use permit and other requirements as set forth herein, commercial solar projects shall be a permitted use in the A-1, B-1 and L-1 Zoning Districts. Such use maybe permitted by the Zoning Board of Appeals ("ZBA") in a State Certified Agricultural District but only when it is demonstrated not to have negative impacts on the soils deemed to be USDA prime soils, prime farmland, prime soils, prime soil lands and lands deemed to be farmlands of Statewide importance.
- B. Lot area, yard and other regulations. The following lot area, yard regulations and siting criteria shall apply to commercial solar projects:
 - (1) Minimum street frontage: 300 feet or such road frontage as determined by the Planning Board necessary to protect the health, safety and welfare of the area.
 - (2) Minimum lot area: 25 contiguous acres under single ownership or such acreage as determined by the Planning Board necessary to protect the health, safety and welfare of the area (when such parcel is not bisected by a public road).
 - (3) Minimum front yard setback to fence: 250 feet.
 - (4) Minimum rear yard setback to fence: 50 feet.
 - (5) Minimum side yard setback to fence: 50 feet.
 - (6) Commercial solar projects shall be set back at least 100 feet from any Important Bird Area as identified by the New York Audubon, and from Federal or State-listed wetlands as identified by the New York State Department of Environmental Conservation and/or the U.S. Army Corps of Engineers.
 - (7) Each commercial solar project application shall demonstrate that the facility operator owns or controls sufficient land area to properly operate and maintain the facility.
 - (8) To prevent the oversaturation of commercial solar projects in one (1) area of the Town of Marcellus, no commercial solar project shall be approved if it is within one (1) mile of an already approved commercial solar project unless the ZBA makes specific findings that it will not have a significant impact on the community character of the area.
 - (9) In siting of commercial solar projects, the applicant shall avoid areas that substantially contribute to and are important to the scenic quality of the landscape.

- (10) Each application shall formally address and assess the availability and feasible use of alternative sites.
- C. Permits required. No person, firm or corporation, or other entity being the owner, occupant, or lessee of any land or premises within the Town of Marcellus shall use or permit the use of land or premises for the construction or installation of a commercial solar project without obtaining a building permit and a special use permit as hereinafter provided. The ZBA shall refer all commercial solar project applications to the Planning Board for review and recommendations.

D. Special use permit.

- (1) In addition to the criteria established pursuant to Section 235-27 of the Town of Marcellus Zoning Regulations, the following criteria are hereby established for purposes of granting a special use permit for a commercial solar project under this Section:
 - (a) Scenic viewsheds. A commercial solar project shall not be installed in any location that would materially detract from or block the view(s) of all or a portion of a recognized scenic viewshed, as viewed from any public road, right-of-way or publicly owned land within the Town of Marcellus or that extends beyond the border of the Town of Marcellus. For purposes of this subsection, consideration shall be given to any relevant portions of the current, amended and/or future Town of Marcellus Comprehensive Plan and/or any other prior, current, amended and/or future officially recognized Town planning document or resource.
 - (b) Emergency shutdown/safety and signage. The applicant shall demonstrate the existence of adequate emergency/safety measures. The applicant shall post an emergency telephone number, in addition to 911, so that the appropriate entities may be contacted should any solar panel or other component of the commercial solar project need immediate repair or attention. This emergency telephone number should be clearly visible and in a location which is convenient and readily noticeable to someone likely to detect a problem. The manufacturer's, or installer's identification and appropriate warning signage shall be posted at the site and be clearly visible.
 - (c) Security. All commercial solar projects shall be secured to the extent practicable to restrict unauthorized access.
 - (d) Access road. To the greatest extent possible, existing roadways shall be used for access to the site and its improvements. In the case of constructing any roadways necessary to access the commercial solar project, they shall be constructed in a way that allows for the passage

of emergency vehicles in the event of an emergency. Each application shall be accompanied by correspondence from the responding fire department and emergency care provider as to the acceptability of the proposed ingress to and egress from the commercial solar project site.

- (e) The development and operation of the commercial solar project shall not have a significant impact on fish, wildlife, animal or plant species or their critical habitats, or other significant habitats identified by the Town of Marcellus or federal or state regulatory agencies.
- (f) Setbacks. Additional setbacks may be required from those set forth in Section (8) by the ZBA in order to provide for the public's safety, health and welfare.
- (g) In the granting of a special use permit, the ZBA will strive to permit the location of commercial solar projects in such a manner so that no one area or neighborhood in the Town shall be over-burdened by the placement of any proposed commercial solar project(s). Screening, including plantings, berms, and other screening methods may be required to mitigate any unavoidable impacts. Such plantings and screening shall be continuously maintained and replaced if dead, dying, or falling into disrepair.
- (h) Mitigation. When it is determined that an applicant's proposed mitigation of visual impacts to the site or area is insufficient, the ZBA may under such circumstances and in the exercise of its reasonable discretion require compensatory offsets to reduce the overall impacts to visual resources from such project. Such offsets may include but are not limited to financial or in-kind donations to a community project such as environmental conservation of a stream or site; restoration of a park, historic structure, or cultural resource; planting of trees along nearby streets; and other similar projects that enhance the community character and are of benefit to the Marcellus community at large.
- (i) Equipment specification sheets shall be documented and submitted for all photovoltaic panels, significant components, mounting systems, batteries and inverters that are to be installed.
- (j) Non-invasive, native ground cover, under and between the rows of solar panels, which are suitable for animal grazing and/or pasturing shall be low-maintenance, drought-resistant, non-fertilizer-dependent and shall be pollinator-friendly to provide a habitat for bees, birds, bats, and other insects or wildlife that pollinate flowering plants, and includes both wild and managed insects.

- (k) For projects proposed by the applicant to be community solar projects, the reviewing board has the authority to require that the applicant open subscription services to Town residents before offering subscriptions to others.
- (l) The use is oriented in its location upon the site as to layout, coverage, screening, means of access and aesthetics so that:
 - [1] The flow control and safety of traffic and human beings shall not be adversely affected to an unreasonable degree;
 - [2] There is reasonable compatibility in all respects with any structure or use in the surrounding area, actual or permitted, which may be directly substantially affected;
 - [3] There shall not be any unreasonable detriment to any structure or use, actual or permitted, in the surrounding area;
 - [4] There is a reasonable provision for open space and yard areas as appropriate to the surrounding area.
 - [5] The removal of existing trees larger than 6 inches in diameter has been minimized to the extent possible.
 - [6] It has been demonstrated that the establishment of the proposed solar facility will not have negative impacts to surrounding property values as established by competent evidence.

E. Submission Requirements.

- (1) The following submission requirements must be observed regarding an application for a commercial solar project, in addition to any further requirements required by the Planning Board pursuant to Section 235-28 of the Town of Marcellus Code:
 - (a) A completed application form as supplied by the Town of Marcellus for site plan approval for a commercial solar project.
 - (b) Proof of ownership of the premises involved or proof that the applicant has written permission of the owner to make such application.
 - (c) Plans and drawings of the proposed commercial solar project installation signed and stamped by a professional engineer registered in New York State showing the proposed layout of the entire commercial solar project along with a description of all components, whether on site or off site, existing vegetation and

proposed clearing and grading of all sites involved, along with proposed screening and fencing. Clearing and/or grading activities are subject to review by the ZBA and shall not commence until the issuance of site plan approval and written authorization from the Town's Code Enforcement Officer. The plans and development plan shall be drawn in sufficient detail and shall further describe:

- [1] Property lines and physical dimensions of the proposed site, including contours at five-foot intervals.
- [2] Location, approximate dimensions and types of all existing structures and uses on the site.
- [3] Location and elevation of the proposed commercial solar project and all components thereof.
- [4] Location of all existing aboveground utility lines within 1,200 linear feet of the site.
- [5] Where applicable, the location of all transmission facilities proposed for installation. All transmission lines and wiring associated with a commercial solar project shall be buried underground and include necessary encasements in accordance with the National Electric Code and Town requirements. The ZBA may recommend waiving this requirement if sufficient engineering data is submitted by the applicant demonstrating that underground transmission lines are not feasible or practical. The applicant is required to show the locations of all proposed overhead electric utility/transmission lines (if permitted) and underground electric utility/transmission lines, including substations and junction boxes and other electrical components for the project on the site plan. All transmission lines and electrical wiring shall be in compliance with the public utility requirements company's for interconnection. connection to the public utility grid must be inspected by the appropriate public utility.
- [6] Location of all service structures proposed as part of the installation.
- [7] Landscape plan showing all existing natural land features, trees, forest cover and all proposed changes to these features, including size and type of plant material, and for screening purposes.

- [8] The plan shall show any trees and/or vegetation which is proposed to be removed for purposes of providing greater solar access.
- [9] A berm, landscape screen, or any other combination acceptable to the Town capable of screening the site, shall be provided along any property line.
- [10] Soil type(s) at the proposed site.
- [11] Submission of a written operation and maintenance plan for the proposed commercial solar project that include measures for maintaining safe access, operational maintenance of the commercial solar project, and general property upkeep, such as mowing and trimming and an agricultural soils preservation plan if applicable. The operation and maintenance plan shall be filed and recorded by the applicant in the Onondaga County Clerk's Office (indexed to the property) following approval of the special use permit.
 - i. for installations on farmland, projects shall comply with the most recently published New York State Department of Agriculture and Markets Guidelines for Solar Energy Projects Construction Mitigation for Agricultural Lands. Where an agricultural soils preservation plan has been approved as part of a project, it shall be a condition of any such approval that such agricultural component will be maintained as approved. (*See also* the "Town of Marcellus Solar Project Guidelines", as adopted by the Town of Marcellus Town Board).
 - ii. Herbicides are prohibited except where the ZBA finds it impractical to use mechanical means to control vegetation and will not have a deleterious effect on the quality of soils.
- (d) Photographic simulations shall be included showing the proposed commercial solar project including elevation views with dimensions in accordance with the manufacturer's specifications and photos of the proposed solar energy system, solar collectors, solar panels and all other components comprising the commercial solar project from all neighboring properties and from other vantage points and at selected hourly increments (including seasons) at full tilt in both directions (shadow study), all as selected by the ZBA. Such photos will depict before and after simulations showing the extent of mitigation from vantage points selected by the ZBA.

- (e) When applicable, certification from a professional engineer or architect registered in New York State indicating that any building or structure to which a solar panel or solar energy system is affixed is capable of handling the loading requirements of the solar panel or solar energy system and various components.
- (f) One- or three-line electrical diagram detailing the solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices.
- (g) Documentation of access to the project site(s), including current and proposed location of all access roads, gates, parking areas, etc.
- (h) Access Road Maintenance Agreement.
- (i) A plan for clearing and/or grading of the site and a stormwater pollution prevention plan (SWPPP) for the site. The SWPPP shall be filed and recorded in the Onondaga County Clerk's Office (indexed against the property) by the applicant following ZBA approval (prior to commencement of construction) and shall provide for access to the Town of Marcellus in the event of a default of the operator's obligations under the SWPPP. The SWPPP shall include a security amount approved by the Town's Consulting Engineer and shall remain in place until decommissioning is complete.
- (j) Documentation of utility notification, including an electric service order number.
- (k) Soil analysis, as performed by an independent third party.
- (l) NYS Agriculture and Markets findings and report, applicable.
- (m) U.S. Army Corps of Engineers wetlands determination, if applicable.
- (n) Detail and specifications for all gates and/or fencing.
- (o) Sign-off from First Responders/Emergency Medical Service providers.
- (p) Sunchart. Where deemed appropriate, the ZBA may require that the applicant submit a sunchart for the proposed site indicating the sun angle for the southern boundary of the site for a minimum four-hour continuous period during the time of the highest sun angle on December 21, along with the potential for existing buildings, structures, and/or vegetation on the site or on adjacent sites to obstruct the solar skyspace of the proposed commercial solar

project. The sunchart shall also indicate the potential for obstructions to the solar skyspace of the proposed commercial solar project under a scenario where an adjacent site is developed as otherwise permitted by applicable provisions of the Town of Marcellus Land Use Regulations with a building/structure built to maximum bulk and height at the minimum setback. Where no standards for setback are established and/or when existing adjacent structures are present, this scenario shall assume a maximum setback of five feet from the property line on the sunchart. The sunchart shall be kept on file at the Town Code Enforcement Office and determine the minimum setback required for any solar collectors from the south property line as well as the solar skyspace that should be considered when development of neighboring properties occurs. This Section in no way places responsibility on the Town for guaranteeing the solar skyspace of a solar energy system in the event setbacks are waived at the applicant's request.

- (q) Solar energy systems shall be marked in order to provide emergency responders with appropriate warning and guidance with respect to isolating the electric systems. Materials used for marking shall be weather-resistant. The marking shall be placed adjacent to the main service disconnect location clearly visible from the location where the lever is operated.
- (r) The average height of the solar panel array shall not exceed 15 feet at its highest tilt measured from the ground and including any base or supporting materials. However, the ZBA may consider heights in excess of 15 feet in circumstances when active agricultural uses are proposed for the life of the lease, but in no case shall panel height exceed 20 feet.
- (s) Color. Neutral paint colors, materials and textures may be required for commercial solar project components, buildings and structures to achieve visual harmony with the surrounding area as approved by the ZBA.
- (t) The design, construction, operation and maintenance of the solar energy system shall prevent the direction, misdirection and/or reflection of solar rays onto neighboring properties, public roads, public parks and public buildings.
- (u) Artificial lighting of commercial solar projects shall be limited to lighting required for safety and operational purposes, shall be shielded from all neighboring properties and public roads, downcast and shall meet dark skies requirements.

- (v) Commercial solar projects shall be enclosed by perimeter fencing to restrict unauthorized access, with "HIGH VOLTAGE" placards affixed every 50 feet, and as otherwise approved by the ZBA. Style and type of fence shall be approved by the ZBA as part of the site plan.
- (w) Only signage used to identify the location of the commercial solar project shall be allowed and such signage shall otherwise comply with the Town's sign regulations and requirements as applicable.
- (x) All applications shall be accompanied by a full environmental assessment form for purposes of environmental review under the New York State Environmental Quality Review Act (SEQRA), including a visual impact analysis. The following additional material may be required by the ZBA:
 - [1] A digital-elevation-model-based project visibility map showing the impact of topography upon visibility of the project from other locations to distances as determined by the reviewing board from the center of the project. Scaled use shall depict the area as not smaller than 2.7 inches, and the base map shall be a published topographic map showing cultural features.
 - [2] No fewer than four (4) color photos taken from locations, as selected by the ZBA and computer- enhanced to simulate the appearance of the as-built aboveground commercial solar project components as they would appear from these locations.
- (y) Applicant shall submit details of the proposed noise that may be generated by solar inverter fans or other commercial solar project components. The ZBA may require a noise analysis to determine potential adverse noise impacts.
- (z) Applicant shall submit a detailed review and evaluation concerning existing drainage conditions as found on the site for any condition that may have been created by prior owners that has impacted the neighboring owners or has caused the water flow from the site to exceed the downstream capacity or has resulted in excessive erosion, overflow, or increased velocities or has been directed to areas that did not have such capacity. Construction plans must take into consideration how to correct such existing conditions during the approval process. The same applies to any issues that should arise over the life of the project and as a part of any operation and maintenance plan or final decommissioning plan since operation and maintenance of the site may develop issues that were not foreseen

during the approval process. Capacity for expansion of runoff retention or detention facilities should be a demonstrated alternative should that be required during the life of the project.

- F. Public hearing. No action shall be taken to issue a special use permit nor the granting of a use or area variance in relation to an application for a commercial solar project until after public notice and a public hearing. Proper notice of a hearing before a board shall be given by legal notice published in the official newspaper of the Town of Marcellus at least five days before the date set for such public hearing(s) and written notice mailed to the applicant or his agent at the address given in the application to be considered. The applicant shall be responsible for notifying, by certified mail, all property owners of record within 500 feet of the outside perimeter of the boundary line of the property involved in the application of the time, date and place of such public hearing at least 10 days prior to such hearing. Notice shall be deemed to have been given if mailed to the property owner at the tax billing address listed on the property tax records of the Town Assessor or at the property address. At least seven days prior to such hearing, the applicant shall file with the Board his/her affidavit verifying the mailing of such notices. Failure of the property owners to receive such notice shall not be deemed a jurisdictional defect.
- G. Compliance with New York State Uniform Fire Prevention and Building Code.
 - (1) Building permit applications shall be accompanied by standard drawings of structural components of the commercial solar project and all its components (including but not limited to solar panel, solar collector, solar energy system, etc.). Drawings and any necessary calculations shall be certified, in writing, by a New York State-registered professional engineer that the system complies with the New York State Uniform Fire Prevention and Building Code. This certification would normally be supplied by the manufacturer.
 - (2) Where the structure, components or installation vary from the standard design or specification, the proposed modification shall be certified by a New York State-registered professional engineer for compliance with the structural design provisions of the New York State Uniform Fire Prevention and Building Code.

- H. Compliance with state, local and national electric codes.
 - (1) Building permit applications shall be accompanied by a line drawing identifying the electrical components of the commercial solar project to be installed in sufficient detail to allow for a determination that the manner of installation conforms with the National Electric Code. The application shall include a statement from a New York State-registered professional engineer indicating that the electrical system conforms with good engineering practices and complies with the National Electric Code, as well as applicable state and local electrical codes. This certification would normally be supplied by the manufacturer. All equipment and materials shall be used or installed in accordance with such drawings and diagrams.
 - (2) Where the electrical components of an installation vary from the standard design or specifications, the proposed modifications shall be reviewed and certified by a New York State-registered professional engineer for compliance with the requirements of the National Electric Code and good engineering practices.
- I. Following construction/installation of the commercial solar project, all disturbed areas where soil has been exposed shall be reseeded with grass and/or planted with low-level vegetation capable of preventing soil erosion and airborne dust and demonstrating established growth. Every Operations and Maintenance Plan shall include provisions for reseeding and established growth.
- J. Post-construction/installation certification. Following the construction/installation of the commercial solar project, the applicant shall provide a post-construction/installation certification from a professional engineer registered in New York State that the project complies with any and all applicable codes and industry practices and has been constructed and operating according to the drawings and development plan(s) submitted to the Town.
- K. Insurance. The applicant, owner, lessee or assignee shall at all times during construction and operation maintain a current insurance policy which will cover installation and operation of the commercial solar project and shall be increased annually per industry standards. Said policy shall provide a minimum of \$5,000,000 property and personal liability coverage. Proof of such policy shall be provided to the Town on an annual basis.' Notwithstanding any terms, conditions, or provisions in any other writing between the parties, the applicant shall agree to effectuate the naming of the Town as an additional insured on the applicant's insurance policies, with the exception of workers' compensation and NYS disability insurance. The policy naming the Town as an additional insured shall:
 - (1) Be an insurance policy from an A.M. Best rated "secured" or better insurer, authorized to conduct business in New York State. A New York State licensed insurer is preferred.

- (2) State that the applicant's insurance coverage shall be primary and noncontributory coverage for the Town, its Board, employees, agents, and volunteers.
- (3) Additional insured status shall be provided by standard or other endorsements that extend coverage to the Town for both on-going and completed operations. A completed copy of the endorsements shall be attached to the certificate of insurance.
- (4) The applicant shall provide a copy of the declaration page of the liability policies with a list of endorsements and forms. If so requested, the applicant will provide a copy of the policy endorsements and forms.
- (5) The certificate of insurance shall contain a provision that coverage afforded under the applicable policy shall not be cancelled or terminated until at least 30 days' prior notice has been provided to the Town. In the event of a termination, cancellation, or lapse of the required insurance coverage, the special use permit to operate the solar energy system shall be immediately suspended and operation of the system shall cease. Upon restoration of the required insurance coverage, to the satisfaction of the Town, permission to operate the commercial solar project may be restored.
- L. Inspections. The Building Inspector, Zoning Enforcement Officer, Code Enforcement Officer and/or Town Engineer shall have the right at any reasonable time to enter, in the company of the owner or its agent, the premises on which a commercial solar project is being or is constructed, to inspect all parts of said commercial solar project installation and require that repairs or alterations be made if, in their judgment, there exists a deficiency in the operation or the structural stability of the commercial solar project or any component thereof. If necessary, the Building Inspector or Town Engineer may order the system secured or to otherwise cease operation. It shall not be required that the owner or agent be present in the event of an emergency situation involving danger to life, limb or property.
- M. Power to impose conditions. In granting any special use permit or variance for a commercial solar project, the ZBA may impose reasonable conditions to the extent that such board finds that such conditions are necessary to minimize any adverse effect or impacts of the proposed use on neighboring properties and to protect the general health, safety and welfare of the Town.
- N. Decommissioning and removal of commercial solar project facilities. The following shall be the minimum requirements to be addressed for the decommissioning of every commercial solar project:
 - (1) The submission of an acceptable Decommissioning Plan and Decommissioning Cash Security subject to review by the Town's consulting Attorneys and Engineers and approved by the Town of Marcellus. For purposes of the Decommissioning Plan and

Decommissioning Security, the following shall constitute "Decommissioning Events" triggering the decommissioning of the site and/or a call on the Decommissioning Cash Security: (a) if construction and installation of the project improvements are not completed within 18 months of commencement of construction (such time period may be reasonably extended upon notification to the Town and with good cause shown for any delays in completion);¹ (b) if the solar energy facility ceases to be used for its intended purpose for twelve (12) consecutive months (such time period may be reasonably extended upon notification to the Town with good cause shown); (c) at the time of decommissioning, complete removal of the project within ninety (90) days thereafter, except for any portions of the project access roads otherwise requested by the owner to remain to facilitate agricultural access to the property or conduit buried more than 4' below ground; (d) upon the end of the project's operation; (e) if the applicant, or its successors or assigns, seeks dissolution or files for bankruptcy or (f) failure to have in place or timely replace adequate decommissioning securities. Renewal securities shall be in place no less than ninety (90) days prior to the expiration of any existing securities.

- (2) All decommissioning activities shall be completed to the reasonable satisfaction of the Town, and consistent with the Decommissioning Plan.
- (3) Such plan shall also include a commitment by the applicant to impose a similar obligation to remove any unused and/or obsolete solar panels upon any person subsequently securing rights to relocate the solar panels.
- (4) At a minimum, the applicant shall include the following binding terms in the decommissioning plan:
 - (a) Complete removal of above-ground and below-ground equipment, fencing, structures, and foundations, including all cables and conduit.
 - (b) Restoration of the surface grade and soil after removal of equipment to the condition (or better), which existed prior to the installation. This includes adding an adequate layer of topsoil where existing topsoil has been removed or eroded, and reseeding and/or reforestation of areas that were cleared of mature trees (with established growth demonstrated).
 - (c) Replanting/replacement of trees destroyed or lost in the decommissioning process with a species that will be capable of reestablishment after 25 years from planting (for those trees installed by the developer).

¹ Such reasonable extensions as noted above may be granted upon a demonstration that said delay or default is caused by forces outside of the Applicant's control.

- (d) Herbaceous revegetation of restored soil areas with native seed mixes, excluding any invasive species.
- (e) Specifically address: the useful lifespan of proposed solar facility and any storage batteries; the current New York State and Federal rules and regulations regarding placement thereof and disposal thereof at the end of their useful lifespan; together with plans for replacement of solar storage batteries. The financial surety required by the Town shall take into account maintenance, replacement, and disposal of solar storage batteries if included in the application for a commercial solar project.
- (f) Such Decommissioning Plan shall be executed by the applicant and the property owner and shall be recorded against the property in the Onondaga County Clerk's Office.
- O. Cash Security. The applicant shall be required to deposit with the Town of Marcellus cash security in an amount sufficient for the faithful performance of the terms and conditions of the permit issued under this Section, and to provide for expenses associated with the decommissioning removal and restoration of the site subsequent to the removal of the solar farm, including but not limited to removal of all solar panels, as well as all above and below ground installed equipment and structures. The amount of the cash security shall be no less than 150% of the cost of the removal of the solar panels and restoration of the site, and shall further be reviewed and adjusted at five-year increments. Such amounts shall account for inflation and prevailing wage costs for decommissioning. In the event of a default upon performance of such conditions or any of them, the cash security shall be forfeited to the Town, upon demand. The cash security shall remain in full force and effect until the complete removal of the solar panels and site restoration is finished.
- P. Fees. Fees for applications and permits under these regulations shall be established by resolution of the Town Board of the Town of Marcellus. It shall be the applicant's responsibility to reimburse the Town for any and all reasonable and necessary legal, engineering and other professional fees incurred by the Town in reviewing and administering an application and operation of a commercial solar project under this Section.
- Q. Waiver. The ZBA may, under appropriate circumstances, waive one or more of the submission requirements contained herein.
- R. Road remediation. The applicant shall be responsible for remediation of any roads or other public property damaged, during the construction of and/or completion of the installation (or removal) of any commercial solar projects approved pursuant to this Section. The Code Enforcement Officer is hereby authorized and directed to ensure a public improvement (road repairs) cash security be posted prior to the issuance of any building permit in an amount sufficient to compensate the Town

for any damage to local roads that is not corrected by the applicant. The Highway Superintendent or Town Engineer is authorized to consult with any necessary professional to determine or confirm the cash security amount all at the sole cost and expense of the applicant. Such cash security shall be in addition to other securities required by this Section.

- S. Agricultural resources. For projects located on agricultural lands:
 - (1) The ZBA shall in all instances give special consideration to areas that consist of Prime Farmland, Prime Soils, Prime Soil Lands, and/or Farmland of Statewide Importance and the removal of such lands when reviewing applications and granting special use permits and site plan approvals to commercial solar project applicants under this law.
 - (2) To the maximum extent practicable, commercial solar projects approved to be located on Prime Farmland, Prime Soils, Prime Soil Lands, and/or Farmland of Statewide Importance shall be constructed in accordance with the construction requirements of the New York State Department of Agriculture and Markets.
 - (3) Commercial solar project applicants 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 grazing or pastured animals. To the extent practicable, when establishing perennial vegetation and beneficial foraging habitat, the applicants shall use native plant species and seed mixes.
 - (4) Where a commercial solar project is to be located on Prime Farmland, Prime Soils, Prime Soil Lands, and/or Farmland of Statewide Importance, the applicant shall retain and designate an environmental monitor to oversee the construction, restoration, and subsequent monitoring of the agricultural lands. The environmental monitor is to be on site whenever construction is occurring on the agricultural land(s) and any construction shall be coordinated with the Town's Code Enforcement Officer and the New York State Department of Agriculture and Markets to develop an appropriate schedule for inspections to assure these lands are being preserved and protected to the greatest extent possible.
 - (5) Fencing and watering systems associated with rotational grazing systems and reduction in farmland viability due to the reduction in remaining productive farmland shall be assessed and mitigated to the greatest extent possible.
 - (6) Structures for overhead collection lines, interconnect cables and transmission lines installed aboveground (when unavoidable) shall be located outside agricultural field boundaries. When above-ground cables

and transmission lines must cross agricultural fields, applicant shall use taller structures that provide longer spanning distances and locate poles on field edges to the greatest extent practicable.

- (a) All buried electric cables in cropland, hay land and improved pastures shall have a minimum depth of 48 inches of cover.
- (b) The Onondaga County Planning Department is to be consulted concerning the type of intercept drain lines whenever buried electric cables alter the natural stratification of soil horizons and natural soil drainage patterns.
- (7) Access roads are to be located along the edge of agricultural fields, in areas next to hedgerows and field boundaries, and in the nonagricultural portions of the site.
- (8) There shall be no cut and fill so as to reduce the risk of creating drainage problems by locating access roads, which cross agricultural fields, along ridge tops and by following field contours to the greatest extent possible.
- (9) The width of access roads across or along agricultural fields is to be no wider than 20 feet so as to minimize the loss of agricultural lands and comply with the New York State Fire Code.
- (10) The surface of commercial solar project access roads to be constructed through agricultural fields should be level with the adjacent field surface where possible.
- (11) All existing drainage and erosion control structures such as diversions, ditches, and tile lines shall be preserved, and applicants shall take appropriate measures to maintain the design and effectiveness of these structures. Applicants shall repair any structure disturbed during construction to as close to original condition as possible unless such structures are to be eliminated based upon an approved site plan for the commercial solar project.
- (12) Culverts and water bars are to be installed to maintain natural drainage patterns.
- (13) All topsoil areas to be used for vehicle and equipment traffic, parking, equipment laydown, and as storage areas are to be stripped. All topsoil stripped from work areas (parking areas, electric cable trenches, along access roads) is to be stockpiled separate from other excavated materials (rock and/or subsoil).
- (14) Where an open trench is required for cable installation, topsoil stripping from the entire work area may be necessary. As a result, additional workspace may be required as part of site plan approval.

- (15) A maximum of 50 feet of temporary workspace is to be provided along open-cut electric cable trenches for proper topsoil segregation. All topsoil will be stockpiled immediately adjacent to the area where stripped/removed and shall be used for restoration on that particular site. No topsoil shall be removed from the site. The site plan shall clearly designate topsoil stockpile areas in the field and on the construction drawings.
- (16) All vehicle and equipment traffic and parking to the access road and/or designated work areas, such as laydown areas, are to be limited in size to the greatest extent practical.
- (17) No vehicles or equipment are to be allowed outside the work area without prior approval from the Environmental Manager.
- (18) In pasture areas, it is necessary to construct temporary or permanent fences around work areas to prevent livestock access, consistent with any applicable landowner agreements.
- (19) Excess concrete used in the construction of the site is not to be buried or left on the surface in active agricultural areas. Concrete trucks will be washed outside of active agricultural areas.
- (20) Restoration requirements. Applicants shall restore all agricultural lands temporarily disturbed by construction as follows:
 - (a) Be decompacted to a depth of 18 inches with a deep ripper or heavy-duty chisel plow. Soil compaction results should be no more than 250 pounds per square inch (PSI) as measured with a soil penetrometer. In areas where the topsoil was stripped, soil decompaction should be conducted prior to topsoil replacement. Following decompaction, removal of all rocks four inches in size or greater from the surface of the subsoil shall occur prior to replacement of topsoil. Topsoil shall be replaced to original depth and original contours reestablished where possible. All rocks shall be removed that are four inches and larger from the surface of the topsoil. Subsoil decompaction and topsoil replacement shall be avoided after October 1 of each year.
 - (b) Regrade all access roads to allow for farm equipment crossing and to restore original surface drainage patterns, or other drainage pattern incorporated into the approved site design by ZBA.
 - (c) Seed all restored agricultural areas with the seed mix specified by the environmental monitor and this Section, in order to maintain consistency with the surrounding areas.
 - (d) All damaged subsurface or surface drainage structures are to be repaired to preconstruction conditions, unless said structures are to

be removed as part of the site plan approval. All surface or subsurface drainage problems resulting from construction of the solar energy project shall be remedied with the appropriate mitigation measures as determined by the Environmental Manager.

- (e) Postpone any restoration practices until favorable (workable, relatively dry) topsoil/subsoil conditions exist. Restoration is not to be conducted while soils are in a wet or plastic state of consistency. Stockpiled topsoil should not be regraded, and subsoil should not be decompacted until plasticity, as determined by the Atterberg Limits and Field Test, is adequately reduced. No project restoration activities are to occur in agricultural fields between the months of October and May unless favorable soil moisture conditions exist.
- (f) Following site restoration, remove all construction debris from the site.
- (g) Following site restoration, the project sponsor is to provide a monitoring and remediation period of no less than two years. General conditions to be monitored include topsoil thickness, relative content of rack and large stones, trench settling, crop production, drainage and repair of severed subsurface drain lines, fences, etc.
- (h) Mitigate any topsoil deficiency and trench settling with imported topsoil that is consistent with the quality of topsoil on the affected site. All excess rocks and large stones are to be removed from the site.
- (i) All concrete piers, footers, or other supports are to be removed to a depth of 48 inches below the soil surface."
- (j) Restoration should include complete removal of conduits.
- (k) There shall be no mixing of the subsoil with the topsoil and there shall be removal and replacement of soil contaminated with subsoil to restore the rich soil for farming.
- T. Payment in Lieu of Tax ("PILOT") Agreement and Host Community Agreement.
 - (1) In every instance of a commercial solar project application, the applicant shall be required to propose a Payment in Lieu of Tax ("PILOT") Agreement. The developer shall also comply with the notice requirements of NYS Real Property Tax Law Section 487. The applicant will then contact the Town's legal counsel to negotiate the terms of said Agreement.
 - (2) In addition to a PILOT Agreement, the applicant shall propose to the Town, on projects involving 1 megawatt and above, a Host Community Agreement

benefit package for consideration by the Town Board as part of the approval process. Once the application package materials are deemed complete and while the ZBA is completing its reviews, the project/application shall be referred to the Town Board to decide on the completion and terms of a Host Community Agreement. This Agreement shall be in addition to a PILOT Agreement.

- U. Reference to Section 94-c. Any proposed solar energy system subject to review by the New York State Board on Electric Generation Siting and the Environment pursuant to Section 10 of the New York State Public Service Law, or the Office of Renewable Energy Siting pursuant to Section 94-c of the New York State Executive Law, shall be subject to all substantive provisions of this Section and any other applicable provisions of the Town of Marcellus Land Use Regulations and applicable local laws.
- V. Adherence to "Solar Project Guidelines". In addition to the above regulations, all commercial solar project applicants shall demonstrate to the ZBA compliance with the Town of Marcellus "Solar Project Guidelines", as amended from time-to-time."

SECTION 5. AMENDMENT OF "TABLE OF LAND USES BY ZONING DISTRICT".

The Table of Land Uses by Zoning District is hereby amended to add "Commercial Solar Project" as a Principal Use and Ground-Mounted Solar Energy Systems as an "Accessory Use" consistent with the terms of this Local Law.

SECTION 6. SEVERABILITY.

If the provisions of any Section, section, subsection, paragraph, subdivision or clause of this Local Law shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this Local Law.

SECTION 7. EFFECTIVE DATE.

This Local Law shall be effective upon filing with the office of the Secretary of State.

SCHEDULE "A" SOLAR PROJECT GUIDELINES

Commercial solar projects are long term temporary, non-agricultural land developments in a community. They generally occur on leased farmlands that are proposed to be returned to the original condition at the end of the lease. Commercial solar projects often propose to use active or fallow agricultural lands as their construction sites. The following presents guidelines as to what lands are considered best suited for commercial solar projects use in the Town of Marcellus and are deemed consistent with the Town's long term goals to balance renewable energy benefits and the potential impacts with agricultural resources.

Prime Farmlands

Where possible Commercial solar projects should be located using a site design that limits the potential for negative impacts to the long term use of productive farmland. "NYS Department of Agriculture and Markets (NYSDAM) recommends that project sponsors avoid installing solar arrays on the most valuable or productive farmland. The following is the order of importance recommended by NYSDAM for solar array avoidance:

- Active rotational farmland (most important)
- Permanent hay land
- Improved pasture
- Unimproved pasture
- Other support lands
- Fallow/inactive farmland (least important)"

Active rotational farmlands are generally considered to be prime farmland.

"Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 8 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service." (NRCS)

Based upon this definition the Town of Marcellus considers soils designated by the NRCS as well drained soils with 0 to 8 percent slopes to be prime community farmland and that commercial solar project development on lands with these soils should be avoided.

Submittals

Prior to submitting engineering drawings for a commercial solar project development, the applicant for a commercial solar project shall submit three drawings/maps that will give provide information for the Town of Marcellus ZBA to better under the features of the site when engineered drawings are submitted.

Site Specific Soil Survey: This document shall field identify the borders of existing site soils in accordance with NRCS standards and shall be performed by an accredited Soil Scientist whose name shall be noted on the drawing. Existing published soil maps and data shall only be used as guideline information by the Sol Scientist. In addition to field identifying site soils the Soil Scientist shall document the depth of the plow layer on the site.

Topographic Map: This document shall be a map of the property (commercial solar project area) showing topographic features and shall be drawn displaying existing contours at two-foot intervals.

Visibility Map: This document shall be a map depicting existing natural (vegetation, topography) and manmade landscape features along roadways bordering the commercial solar project and within a 1/2 mile radius of the site that provide potential visual screening for the proposed commercial solar project location. The map may use published data as its base. This document should include a graphic representation of the potential natural screening of a proposed commercial solar project site with a rating of high, medium, or low. The regulations include an option for the ZBA to request of a "digital-elevation-model-based project visibility map showing the impact of topography upon visibility of the project from other locations to a distance radius of three miles from the center of the project." However, this map may be more appropriate to use in areas of documented vistas and viewsheds established by the ZBA.

Commercial Solar Project Features

When engineering drawings are submitted for review, the following important features of the solar commercial solar project should be considered:

- Avoiding the use of concrete footings and driving the support posts into the ground to reduce or minimize disturbance of the existing farmland soil profile.
- Designing the structural system that the panels will sit upon so that a single post to can be used to support the individual solar panels.
- Spacing of solar panels and panel rows with sufficient distances between them that will allow adequate sunlight penetration for viable plant growth on the farmland surfaces under the panels.

- Enabling the potential for dual use of the commercial solar farmland by setting panels approximately 2 meters above grade so that grazing (cattle, cows, sheep) and planting of some farm crops may occur.
- Stringing electrical connections/wires on the panel structures or burying wires in shallow laid conduits setting them in the plow layer so the original soil profile is not disrupted.
- Designing the site plan and its management of stormwater runoff to work with existing topography to minimize site grading and disruption of existing farm soils.
- Restoration of the solar ground surfaces after construction. If not proposed for dual use the site should use pollinator plant species (grasses, wildflowers) to create habitat features for small animals, birds, butterflies, and insects. Mowing of these areas should be limited to no more than twice a year, once before May first and once near the end of October.
- If the commercial solar project surfaces are restored to habitat landscape small openings in the bottom of the fence should be made to allow movement of small animals in and out of the farm.

Visual Mitigation

The commercial solar project applicants should provide a system for screening views of commercial solar project from surrounding areas. This commonly entails a monoculture planting of smaller growth evergreen trees set in a line along the borders of the commercial solar project, but in a naturalistic way. Plant species often include arborvitae or red cedar. In suburban and rural areas, the arborvitae is deer food and the red cedar is a host for cedar apple rust (apple grower's problem). The monoculture evergreen planting when installed with 6 foot high plants will take a significant portion of the lease to provide a meaningful screen for the commercial solar project. Other visual mitigation solutions may exist.

On a relatively landscape area with a bordering local road a commercial solar project may be screened with a constructed low (6 foot +/-) mowable earthen berm following the roadway alignment that is planted to pollinator species of grasses and wildflowers.

Rather than installing a monoculture line of plants a commercial solar project plan may propose a hedgerow character planting using a mix of evergreen (60%) and deciduous (40%) species. The plantings should be clustered and staggered in much the same manner of natural hedgerow growth. Plants should be installed on a low mound thereby giving better height at time of planting and maintaining the original farm soil profile.

Planting of larger growth evergreen trees (white pine, white spruce) at locations in or bordering the commercial solar project that would be out of the sun angle and thereby not impact the electrical system. The mature growth would help to mitigate the overall visual impact of the commercial solar project.

Woodland Commercial Solar Project Sites

Woodland sites that may be proposed for commercial solar project use generally do not have prime agricultural soils. Use of a wooded area for a commercial solar project would require land clearing, stumping the land surface, and modifying of the soil profile.

Should a wooded site be proposed for commercial solar project use it should not be dominated by the growth of native plant species. These would include sugar maple, red maple, black birch, beech, hickory, red oak, white oak, shadblow, and white pine.

A commercial solar project site proposed in a woodland dominated by the alien buckthorn and Norway maple or an old declining plantation of spruce or pine could be an ideal woodland location for a commercial solar project.