




**MEMORANDUM**

**To:** New Castle Town Board

**From:** Sabrina D. Charney Hull, Director of Planning 

**Date:** June 12, 2017

**Re:** Proposed Solar Local Law

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As per your June 6, 3017 Town Board work session, Town Staff have reviewed the proposed draft solar local law with Doug Hertz who works within the solar industry. Attached you find a revised local law reflective of these discussions. I will be available at your work session on June 13<sup>th</sup> for further discussion.

If you have any questions, please let me know.

/att

cc: Jill Simon-Shapiro, Town Administrator  
Ciara Gannon, Assistant to the Town Administrator  
Mary Deems, Town Clerk  
Christina Papes, Deputy Town Clerk  
Ed Phillips, Esq., Town Counsel  
Richard Polcari, New Castle Building Inspector

LOCAL LAW NO. \_\_\_\_ OF 2017

TOWN BOARD  
TOWN OF NEW CASTLE

LOCAL LAW AMENDING  
CHAPTER 60 OF THE CODE OF THE TOWN OF NEW CASTLE

A LOCAL LAW to amend  
Chapter 60 of the Town Code  
concerning Solar Collectors and  
Installations.

A LOCAL LAW to amend Chapter 60 of the Code of the Town of New Castle concerning Solar Collectors and Installations.

BE IT ENACTED by the Town Board of the Town of New Castle as follows:

**Section 1.** Chapter 60, Section 410, Subsection L the Code of the Town of New Castle is hereby added as follows:

**§60-410. District regulations.**

...

**L. Solar Collectors and Installations.**

**(1) Purpose and intent.**

**(a)** Solar energy is a renewable and nonpolluting energy resource that can prevent fossil fuel emissions and reduce a municipality's energy load. Energy generated from solar energy systems can be used to offset energy demand on the grid where excess solar power is generated.

**(b)** The use of solar energy equipment for the purpose of providing electricity and energy for heating and/or cooling is a priority and is a necessary component of the Town of New Castle's current and long-term sustainability agenda.

**(c)** This chapter aims to promote the accommodation of solar energy systems and equipment and the provision for adequate sunlight and convenience of access necessary therefor, and to balance the potential impact on neighbors when solar collectors may be installed near their property while preserving the

rights of property owners to install solar energy systems without excess regulation.

**(2) Definitions.**

**A.**

For the purposes of this chapter, the following terms, phrases, words and their derivations shall have the meanings given herein. When not inconsistent with the context, words used in the present tense include the future, words used in the plural number include the singular number and words used in the singular number include the plural number. The word "shall" is always mandatory and not merely directory.

**B.**

As used in this chapter, the following certain words and phrases shall have the meanings indicated:

**BUILDING-INTEGRATED PHOTOVOLTAIC (BIPV) COLLECTORS:** A solar energy system that consists of integrating photovoltaic modules into the building envelope, such as the roof or the façade, which does not alter the roofline.

**FLUSH-MOUNTED SOLAR PANEL:** A photovoltaic panel or tile that is installed flush to the surface of a roof and which cannot be angled or raised.

**FREESTANDING OR GROUND-MOUNTED SOLAR ENERGY COLLECTOR:** A solar energy system that is directly installed in the ground and is not attached or affixed to an existing structure. Pole-mounted solar energy systems shall be considered freestanding or ground-mounted solar energy systems for purposes of this chapter.

**LARGE-SCALE SOLAR COLLECTION SYSTEM OR SOLAR FARM:** An area of land or other area, on property consisting of ten acres or more, used for a solar collection system principally used to capture solar energy and convert it to electrical energy for interconnection to the utility grid under NYS regulations for remote net-metering and/or Community Distributed Generation (CDG or community solar). Solar facilities consist of one or more freestanding ground- or roof-mounted solar collector devices, solar-related equipment and other accessory structures and buildings, including light reflectors, concentrators, heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures and facilities.

**PASSIVE SOLAR DESIGN:** A solar energy system that relies upon original or retrofitted design features and building materials of a structure to enhance the use of natural forces to provide heating and cooling within a building.

**PHOTOVOLTAIC (PV) COLLECTOR:** A solar energy system that produces electricity by the use of semiconductor devices, called photovoltaic cells, which generate electricity whenever light strikes them.

**QUALIFIED SOLAR INSTALLER:** A person who has skills and knowledge related to the construction and operation of solar electrical equipment 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 NYSEDA's list of eligible installers or NABCEP's list of certified installers may be deemed to be qualified solar installers if the Building Inspector or such other Town officer or employee 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.

**ROOFTOP OR BUILDING-MOUNTED SOLAR COLLECTOR:** A solar system in which solar panels are mounted on top of the structure of a roof either as a flush-mounted system or as a module fixed to frames which can be tilted toward the south at an optimal angle. This includes carports and parking garages.

**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 THERMAL COLLECTOR** A device or combination of devices which relies upon solar radiation as an energy source and that is employed for the purposes of heating or cooling a building, the heating of water. For the purposes of this chapter, a solar collector does not include any solar energy system of four square feet in size or less.

**SOLAR ENERGY EQUIPMENT** Solar collectors, controls, energy storage devices, heat pumps, heat exchangers, batteries, and other materials, hardware or equipment necessary to the process by which solar radiation is collected, converted into another form of energy, stored, protected from unnecessary dissipation and distributed.

**(3) Permitting and placement requirements.**

(a) Building permits shall be required for installation of all solar collectors, including rooftop, BIPV, building-mounted, freestanding and ground-mounted solar collectors.

(b) Rooftop and building-mounted solar collectors are permitted in all zoning districts, subject to the following requirements:

[1] Any height limitations provided in the Town Code shall not be applicable to solar collectors. Solar collectors shall be erected only to such height as reasonably necessary to accomplish the purpose for which they are intended to serve, but in no case on flat roofs shall the maximum height of panel in tilted position exceed five feet above the surface of the roof.

[2] The design of the solar energy system shall make best efforts to blend into the architecture of the building or be screened from routine view from public rights-of-way. Rooftop and building-mounted solar collectors shall use black or neutral, non-reflective colors, provided such colors are commercially available.

[3] Panels on pitched roofs (above 1/12 pitch) must be mounted at the same angle as the roof's surface with a maximum distance of 12 inches between the roof and highest edge of the system, unless superseded by New York State law.

(c) Building-integrated photovoltaic (BIPV) systems. BIPV systems are permitted in all zoning districts.

(d) Freestanding and Ground-mounted solar collectors are permitted as accessory structures in all zoning districts, subject to the following requirements:

[1] The location of the solar collector shall meet all applicable setback requirements for accessory structures in zoning district in which it is located. Solar collectors are prohibited within wetlands and are subject to permit review within wetland buffers.

[2] Site development plan approval by the Planning Board shall be required for freestanding and ground-mounted solar collector installations exceeding a total of 250 square feet of surface area.

[3] The height of the solar collector and any mounts shall not exceed 20 feet when oriented at maximum tilt.

[4] The total surface area of all ground-mounted and freestanding solar collectors on the lot shall not exceed 1,000 square feet. The area beneath ground-mounted and freestanding solar collectors shall be used in calculating total surface area.

[5] The solar collector shall be located in a side or rear yard.

[6] During site development plan review, the Planning Board shall require Freestanding and Ground-mounted solar collectors to 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 surrounding area. The proposed screening shall not interfere with normal operation of the solar collectors.

[7] For applications subject to site development plan review by the Planning Board, solar energy equipment shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading for property to the north, while still providing adequate solar access for collectors.

[8] Solar collectors and solar energy equipment shall not be placed in such a way as to obstruct proper sight distance or otherwise interfere with pedestrian or traffic flow or means of ingress or egress.

(e) If a solar collector ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall remove the collector, mount and associated equipment and facilities by no later than 90 days after the end of the twelve-month period.

#### **(4) Large-scale solar collection system or solar farm.**

(a) Large-scale Solar Collectors or Solar Farms are permitted in all zoning districts and shall require a special use permit from the Planning Board in accordance with provisions of §60-430 which shall be valid for a term of 25 years , and shall meet the following additional requirements:

[1] The total development coverage of all buildings and structures on a lot, including freestanding solar panels which shall be measured in terms of surface area for the purpose of calculating coverage, shall not exceed 75%.

[2] Height, setback and lot area restrictions.

[a] The minimum lot area shall be 10 acres.

[b] The maximum height for freestanding solar panels located on the ground or attached to a framework located on the ground shall not exceed 20 feet in height above the ground.

[c] The minimum setback from property lines for all solar collectors and equipment shall be 100 feet.

**[d]** A landscaped buffer shall be provided around all solar collectors and equipment to provide screening from adjacent properties and roads.

**[3]** Design standards

**[a]** Removal of trees and other existing vegetation should be minimized or offset with planting elsewhere on the property.

**[b]** All on-site utility and transmission lines shall, to the extent feasible, be placed underground.

**[c]** All solar collectors and mechanical equipment, including any structure for batteries or storage cells, shall be enclosed by a minimum six-foot-high fence with a self-locking gate provided with landscape screening.

**[d]** A large-scale solar collector or solar farm to be connected to the utility grid shall provide a “proof of concept” letter from the utility company acknowledging the solar farm will be connected to the utility grid in order to sell electricity through the public utility. Such information should be included as part of the Building Permit Application.

**[4]** Signs

**[a]** A sign not to exceed eight square feet shall be placed on or near the main access point and shall list the facility name, owner and phone number.

**[b]** A clearly visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and substations.

**[5]** Abandonment

**[a]** All applications for a large-scale solar collection system or solar farm shall be accompanied by a decommissioning plan to be implemented upon abandonment, or cessation of activity or in conjunction with removal of the facility, prior to issuance of a building permit.

**[b]** 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 aboveground 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 any invasive species.

[4] The plan should include a time frame for the completion of site restoration work.

[c] In the event that the facility is not completed and functioning within 18 months of the issuance of the final special permit approval, the Town may notify the operator and/or the owner to complete construction and installation of the facility within 180 days. If the owner and/or operator fails to perform and unless documentation is provided from utility, the Town may notify the owner and/or operator that failure to complete construction has been deemed to constitute an abandonment and the Town may require the owner and/or operator to implement the decommissioning plan.

[d] Upon cessation of activity of a constructed facility for more than 12 consecutive months, the Town may notify the owner and/or operator of the facility to implement the decommissioning plan at the owner's expense.

(b) A special permit approved by the Planning Board for a Large-scale Solar Collector or Solar Farm may be renewed by the Planning Board for an additional five year term upon written request of the Applicant. Upon each request for a renewal, the Applicant shall demonstrate compliance with all conditions of the special permit, the general special permit standards set forth at §60-430 of this Chapter, and the forgoing additional requirements set forth at §60-410.L(4)(a). A public hearing for the special permit renewal may be scheduled at the discretion of the Planning Board, but is not required. Consideration shall be given to updating the infrastructure to meet current technology standards.

#### **(5) Safety.**

(a) All solar collector installations must be performed by a qualified solar installer, and prior to operation, the electrical connections must be inspected by the Building Inspector and by an appropriate electrical inspection person or agency, as determined by the Town. In addition, any connection to the public utility grid must be inspected by the appropriate public utility.

(b) Solar energy systems shall be maintained in good working order.



(c) When solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting all applicable requirements when in use and when no longer used shall be disposed of in accordance with the laws and regulations of the Town and other applicable laws and regulations.

(d) Marking of equipment

[1] Solar energy systems and equipment 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] For commercial application, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.

[3] In the event any of the standards in this Subsection (d) 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 such Code shall apply.

**Section 2.** Chapter 60, Section 430, Subsection O the Code of the Town of New Castle is hereby amended to add Item 18 as follows:

(18) Large-scale solar collection system or solar farm. The special standards set forth at Section 60-410(L)(4) of this Chapter, as may be amended from time to time, shall apply to any large-scale solar collection system or solar farm, as defined by this Chapter.

**Section 3. Ratification, Readoption and Confirmation**

Except as specifically modified by the amendments contained herein, Chapter 60 of the Town of New Castle is otherwise to remain in full force and effect and is otherwise ratified, readopted and confirmed.

**Section 4. Numbering for Codification**

It is the intention of the Town of New Castle and it is hereby enacted that the provisions of this Local Law shall be included in the Code of the Town of New Castle; that the sections and subsections of this Local Law may be re-numbered or re-lettered by the Codifier to accomplish such intention; that the Codifier shall make no substantive changes to this Local Law; that the word “Local Law” shall be changed to “Chapter,” “Section” or other appropriate word as required for codification; and that any such rearranging of the numbering and editing shall not affect the validity of this Local Law or the provisions of the Code affected thereby.

**Section 5. Severability**

The provisions of this Local Law are separable and if any provision, clause, sentence, subsection, word or part thereof is held illegal, invalid or unconstitutional, or inapplicable to any person or circumstance, such illegality, invalidity or unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, subsections, words or parts of this Local Law or their petition to other persons or circumstances. It is hereby declared to be the legislative intent that this Local Law would have been adopted if such illegal, invalid or unconstitutional provision, clause, sentence, subsection, word or part had not been included therein, and if such person or circumstance to which the Local Law or part hereof is held inapplicable had been specifically exempt there from.

**Section 6. Effective Date**

This local law shall take effect immediately upon filing with the Office of the Secretary of State.