

Town of Red Hook, New York
Part II, General Legislation
Ch. 143 Zoning, Article V: Supplementary regulations

Current as of November 2, 2020

§ 143-37. Solar energy systems. [Amended 12-12-2017 by L.L. No. 5-2017]

A. Intent and purposes. The intent of these regulations is to promote safe, effective, and efficient use of solar energy systems, to provide for appropriate locations in the community for solar energy systems, to ensure compatibility with surrounding land uses, and to protect the health, safety and welfare of the community. Additional purposes are to:

- (1) Provide property owners and business owners/operators with flexibility in satisfying their energy needs and to decrease the costs of energy to such owners and operators.
- (2) Reduce overall nonrenewable energy demands within the Town of Red Hook and to promote a renewable, clean, abundant, and nonpolluting source of energy.
- (3) Integrate solar energy systems seamlessly into Red Hook's neighborhoods and landscapes without diminishing the quality of life found within the Town or adversely impacting its irreplaceable environmental resources.
- (4) Make provisions for access to sunlight for solar energy systems so far as conditions permit.
- (5) Increase employment and business opportunities in the Town and region by furthering the installation of solar energy systems.
- (6) Contribute to meeting New York State's goal of generating 50% of all electrical energy needs from renewable sources by 2030 in order to reduce statewide greenhouse gas emissions by 40% by 2030.

B. Applicability. Section 143-37 of the Zoning Law applies to all solar energy systems installed or modified after December 1, 2017, excluding general maintenance and repair. All solar energy systems shall be installed, operated, and maintained in the Town of Red Hook in compliance with this section. Any modification or structural change that alters the size or placement of an existing solar energy system by 50% or more, or that triggers a building permit, shall comply with the provisions of this § 143-37. Solar energy systems are divided into three types, small, medium, and large, each of which are regulated differently due to their size and potential impacts upon Red Hook's natural, cultural, scenic and other environmental resources.

- (1) In accordance with Chapter 742 of the Laws of 1979 of the State of New York, the accommodation of solar energy systems and the protection of access to sunlight for such systems shall be considered in the application of all site plan and special use permit review and approval provisions of this chapter and all subdivision review and approval provisions of Chapter 120.

C. Permitted locations. [Amended 5-30-2018 by L.L. No. 3-2018]

- (1) Small solar energy systems. Small solar energy systems, as defined herein, are permitted in all zoning districts with the exception of ground-mounted systems, which are prohibited in the TND, H, HB, B1, and WC Zoning Districts. Small ground-mounted solar systems are permitted as principal and

accessory uses, except within the HL-O Zoning District where ground-mounted solar systems are permitted only as accessory uses subject to special use permit review and approval in accordance with this section and Article VI.

(2) Medium solar energy systems. Medium solar energy systems, as defined herein, are permitted in all zoning districts with the exception of ground-mounted systems which are prohibited in the TND, H, HB, B1, and WC Zoning Districts, subject to site plan review and approval in accordance with this section and Article VII of the Zoning Law. Medium ground-mounted solar systems are permitted as principal and accessory uses, except within the HL-O Zoning District where ground-mounted solar systems are permitted only as accessory uses subject to special use permit review and approval in accordance with this section of Article VI.

(3) Large solar energy systems. Large solar energy systems, as defined herein, are permitted in all zoning districts except for the TND, H, HB, B1, and WC, subject to review and approval of a special use permit in accordance with this section and Article VI of the Zoning Law. Large ground-mounted solar systems are permitted as principal and accessory uses, except within the HL-O Zoning District where ground-mounted solar systems are permitted only as accessory uses subject to special use permit review and approval in accordance with this section and Article VI. Farms that are within a New York State Agricultural District are general exempt from the large solar energy system regulations found in this § 143-37, provided the solar energy system is considered "on-farm" equipment, designed, installed, and operated so that the anticipated annual total amount of electrical energy generated does not exceed the anticipated annual total electrical needs of the farm by more than 110%. Farms within a New York State Agricultural District that meet the "on-farm" equipment threshold of 110% shall comply with § 143-37E and shall obtain a waiver of site plan approval or site plan approval from the Planning Board.

D. Solar energy system requirements.

(1) Small solar energy systems. A small solar energy system shall comply with the following conditions:

(a) For roof-mounted small solar energy systems:

[1] A New York State Unified Solar Permit shall be required.

[2] The solar energy system has a rated capacity of less than 25 kW.

[3] The solar energy system does not require a zoning variance from the Zoning Board of Appeals or a special use permit from the planning board.

[4] The solar energy system is compliant with the New York State Uniform Code.

[5] The solar energy system is mounted on a lawfully permitted building or accessory structure and does not exceed the maximum height restrictions within the zoning district in which it is located.

[6] Roof-mounted systems on a sloped or flat roof shall not be required to be screened, unless otherwise required herein.

(b) For building-integrated small solar energy systems:

[1] The solar energy system meets the requirements of § 143-37 D(1)(a).

[2] The solar energy system maintains a uniform profile or surface of vertical walls, window openings, and roofing.

[3] A separate building permit for a building-integrated solar energy system shall not be required if it is installed when the building is first constructed, provided the building meets all applicable setback and other regulations for the zoning district in which it is located.

(c) Ground-mounted small solar energy systems are subject to the following:

[1] The small solar energy system meets the requirements of §§ 143-37 D(1)(a)[1] through [4].

[2] A building permit is obtained for the installation of the solar energy system.

[3] The solar energy system meets all applicable setback requirements for accessory structures in the zoning district in which it is located and is not located within the front yard of the lot. Ground-mounted small solar energy systems are prohibited in the front yard.

[4] The solar energy system shall not project closer to the fronting street than the principal building on the lot.

[5] The solar energy system shall be screened from public viewing locations through the use of architectural features, earth berms, landscaping, fencing, or other screening, which will harmonize the solar energy system with the character of the property and surrounding neighborhood.

[6] The height of the solar energy system shall not exceed 12 feet when oriented at maximum tilt.

[7] Solar energy system components shall be designed with an anti-reflective coating. Verification shall be provided to the Code Enforcement Officer that the components of the solar energy system have this quality.

(2) Medium solar energy systems. Medium solar energy systems are permitted as principal and accessory uses subject to site plan review and approval prior to construction, installation or modification and to the following conditions:

(a) The solar energy system meets the requirements of §§ 143.37 D(1)(a)[1], [4] and where applicable, [5].

(b) The solar energy system has a rated capacity of 25 kW to less than 200 kW.

(c) The parcel shall be three acres or larger.

(d) The principal purpose of the solar energy system is to provide electrical power to be consumed on-site or to provide power to be shared with other power customers (which may include both physical or virtual aggregation).

(e) The solar energy system is screened through the use of architectural features, earth berms, landscaping, fencing, or other screening that will harmonize with the character of the property and surrounding area. The height of a ground-mounted solar collector and any mounts shall not exceed 12 feet when oriented at maximum tilt.

(f) Submission of a screening and landscaping plan showing adequate measures to screen through landscaping, grading or other means. The screening and landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping and/or grading used to screen and/or mitigate adverse aesthetic effects of the system. Ground-mounted medium solar energy systems are prohibited in the front yard.

(g) Total lot coverage shall not exceed 60% for all structures. Lot coverage shall be calculated for medium solar energy systems as the area measured from the outer edge(s) of the solar panel(s) at maximum horizontal tilt and shall include all other solar photovoltaic related equipment.

(3) Large solar energy systems. Large solar energy systems are permitted as a principal and accessory use of land subject to a special use permit from the Planning Board in accordance with Article VI of the Zoning Law and the following conditions:

(a) Lot coverage shall not exceed 10 acres of land per parcel as measured in § 143-37D(2)(g).

(b) Compliance with the applicable setback requirements in the zoning district.

(c) Large solar energy systems are exempt from the lot frontage requirements.

(d) The total height of the solar panels for large solar energy systems shall not exceed 12 feet in height.

(e) The solar energy system meets the requirements of § 143-37D(1)(c)[7].

(f) The solar energy system shall be properly maintained and be kept free from hazards including, but not limited to, faulty wiring, loose fastenings, and creation of an unsafe condition or detriment to public health, safety or general welfare.

(g) The solar energy system owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Red Hook Fire Company's Fire Chief. The owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar energy system shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.

(h) The solar energy system shall be enclosed by fencing to prevent unauthorized access. Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing. The Planning Board shall determine the type of fencing, giving due consideration to the importance of maintaining wildlife movements and landscape connectivity. The solar energy system and the fencing itself may be further screened to avoid adverse aesthetic impacts.

(i) The applicant shall minimize the number and width of access roads, avoid or minimize cut and fill on sloping terrain and use natural terrain where feasible for access points.

(j) Large solar energy systems are considered abandoned after 365 days without electrical energy generation and must be removed from the property. To ensure the proper removal of large solar energy systems, a decommissioning plan shall be submitted as part of the special use permit application. Compliance with this plan shall be a condition of the issuance of a special use permit under this section. The decommissioning plan must specify that after the large solar energy system can no longer be used, the applicant or any subsequent owner shall remove it. The plan shall demonstrate how the removal of all infrastructures and the remediation of soil

and vegetation shall be conducted to return the parcel to its original state, prior to construction. Removal of large solar energy systems must be completed in accordance with the decommissioning plan. If the large solar energy system is not decommissioned after being considered abandoned, the Town may remove the system, restore the property and impose a lien on the property to cover the costs of such removal and restoration to the Town.

(k) As part of the site plan and special use permit review processes, the applicant shall provide the following documents, as deemed applicable by the Planning Board:

[1] A site plan showing:

[a] Property lines and physical features, including roads, for the project site.

[b] Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures and proposed maintenance plan to prevent soil erosion. The use of herbicides and pesticides is prohibited. Any alteration to property required for construction and maintenance of solar system will require restoration of land to preexisting condition upon decommissioning.

[c] Prints or drawings of the solar energy system showing the proposed layout of the system, any potential shading from nearby structures, the distance between the proposed solar collector and all property lines and existing on-site buildings and structures, and the tallest finished height of the solar collector.

[d] Documentation of the major system components to be used, including the panels, mounting system, and inverter.

[e] Name, address, and contact information for proposed system installer.

[f] Name, address, phone number and signature of the property owner(s), project proponent, as well as all co-proponents if any.

[g] The name, contact information and signature of any agents representing the project proponent.

[h] Zoning district designation for the parcel(s) of land comprising the project site.

[i] Proof the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems are exempt from this requirement.

E. Requirements for all solar energy systems.

(1) All solar energy systems in the Town of Red Hook shall comply with the following:

(a) Solar energy systems shall not be installed within a designated wetland as defined by the New York State Department of Environmental Conservation, the United States Army Corps of Engineers or within any locally protected wetland.

(b) A ground-mounted solar energy system shall not be installed in the AB District on Important Farmland as defined in § 143-4 and if on a farm, only where consistent with a Farmland Protection Plan as defined in § 143-4, prepared in accordance with this Zoning chapter. Design

of ground-mounted solar energy systems shall favor concurrent use of the land for livestock grazing or similar sustainable use.

(c) Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of ground-mounted solar energy systems or otherwise prescribed by applicable laws and regulations.

(d) All solar energy systems that are connected to the electric distribution or transmission system shall obtain an interconnection agreement with the applicable electric utility. Solar energy systems connected directly to the distribution or transmission system must obtain an interconnection agreement with the interconnecting electric utility. Off-grid systems are exempt from this requirement.

(e) The solar energy system shall comply with the New York State Uniform Code, as amended, and any additional electrical and safety regulations adopted by the State of New York.

(f) A qualified solar installer as defined herein shall install all systems.

(g) All exterior electrical lines shall be placed in conduit and buried.

(h) Notwithstanding the height limitations in the District Schedule of Area and Bulk Regulations:

[1] For a building-mounted system installed on a pitched roof, the system shall be installed at the same angle as the roof on which it is installed with a maximum distance, measured perpendicular to the roof, of eight inches between the roof and edge or surface of the system.

[2] For a building-mounted system installed on a sloped roof, the highest point of the system shall not exceed the highest point of the roof to which it is attached.

[3] For a building-mounted system installed on a flat roof, the highest point of the system shall be permitted to extend up to two feet above the surface of the roof or the parapet, whichever is higher.

(i) Small and medium ground-mounted systems may not exceed the permitted height of accessory structures in the zoning district or 12 feet from the ground: whichever is less.

F. Inspection, safety and removal.

(1) The Town of Red Hook reserves the right to inspect a solar energy system for building or fire code compliance and safety with twenty-four-hour notification to the property owner and/or owner-operator of the system.

(2) Fencing to prevent unauthorized access shall enclose all ground-mounted medium and large solar energy systems. Warning signs with the owner's contact information shall be placed on the entrance and perimeter of the fencing.

(3) Medium and large solar energy systems shall be removed, at the owner's or operator's expense, within 365 days of determination by the Code Enforcement Officer that the system is no longer being maintained in an operable state of good repair or is no longer supplying solar power. Such an order shall be in writing, shall offer the option to rectify, and shall notify the owner, property owner, or facility operator of his or her right to appeal such determination to the Zoning Board of Appeals.

(a) Removal shall include solar collectors, cabling, electrical components, accessory structures, and any associated facilities below grade.

(b) Disturbed earth shall be graded and reseeded.

(4) If upon inspection the Town of Red Hook determines that a violation of the New York State Uniform Code exists, or that the system otherwise poses a safety hazard to persons or property, the Town of Red Hook may order the owner, property owner, or facility operator to repair or remove the system within a reasonable time as determined by the Code Enforcement Officer in accordance with the procedures in § 74-16 of the Town Code.

(5) If a system owner, property owner, or facility operator fails to repair or remove a solar energy system as ordered, and any appeal rights have been exhausted, the Town of Red Hook may enter the property, remove the system and charge the system owner, property owner, or facility operator for all costs and expenses of removal, including reasonable attorney's fees or pursue other legal action to have the system removed at the system owner, property owner, or facility operator's expense.

(6) In addition to any other available remedies, any unpaid costs resulting from the Town of Red Hook's removal of a vacated abandoned or decommissioned solar energy system shall constitute a lien upon the real property against which the costs were charged. Legal counsel for the Town of Red Hook shall institute appropriate action for the recovery of such costs, plus attorney's fees, including, but not limited to, filing of municipal claims pursuant to the cost of such work, 6% interest per annum, plus a penalty of 5% of the amount due plus attorney's fees and costs incurred by the Town of Red Hook in connection with the removal work and the filing of Red Hook's claim.

G. Signage.

(1) No signage or graphic content may be displayed on the solar energy system except the manufacturer's badge, safety information and equipment specification information. Said information shall be depicted within an area no more than 36 square inches in size.

(2) Disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface.

(3) Twenty-four-hour emergency contact information shall be clearly displayed.

(4) Systems and sites may not be used for displaying advertising except for reasonable identification of the owner/operator and shall comply with sign standards in § 143-27.

H. Nonconforming buildings and lots.

(1) Building-mounted systems.

(a) If a building-mounted system is to be installed on any building or structure that is nonconforming because its height violates the height restrictions of the zoning district in which it is located, the building-mounted system shall be permitted, so long as the building-mounted system does not extend above the peak or highest point of the roof to which it is mounted and so long as it complies with the other provisions of this section.

(b) If a building-mounted system is to be installed on a building or structure on a nonconforming lot that does not meet the minimum setbacks required and/or exceeds the lot coverage limits for the zoning district in which it is located, a building-mounted system shall be permitted, so

long as the nonconforming setback(s) or lot coverage is not increased and provided that the application complies with the other provisions of this Zoning chapter.

(2) Ground-mounted systems.

(a) If a ground-mounted system is to be installed on a property containing a structure that is nonconforming because the required minimum setbacks are exceeded, the solar energy system shall be permitted so long as the system does not encroach into the required setback for the district.

(b) If a ground-mounted system is to be installed on a property that is nonconforming because it violates zoning district requirements other than setbacks, a special use permit from the Planning Board shall be required to permit the proposed installation.

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