



TOWN OF LANCASTER

OFFICE OF THE TOWN CLERK
701 MAIN STREET
LANCASTER, MA 01523

TO WHOM IT MAY CONCERN:

The following is a True Copy of ARTICLE 7 of the Town of Lancaster November 14, 2022 Special Town Meeting and the vote passed thereunder

To see if the Town will vote to amend Article XVII of the Zoning Bylaw for the purpose of allowing Standalone Energy Storage Systems, and clarifying references to the electrical code, as follows:

- (1) Renaming Article XVII as follows:

ARTICLE XVII Solar Photovoltaic and Standalone Energy Storage Systems

- (2) Striking Section 220-73 of the Zoning Bylaw and inserting, in place thereof, the following:

§ 220-73. Purpose.

- A. The purpose of this bylaw is to provide appropriate siting for solar photovoltaic energy systems for power generation and standalone energy storage systems for energy storage and distribution, while preserving the right of homeowners to install solar systems for residential use.
- A. Roof-mounted solar energy installations may be constructed in any zoning district without need for a special permit.
 - B. Ground-mounted solar energy installations within a Solar Overlay District may be constructed without need for a special permit and according to the site plan criteria as set forth herein.
 - C. Ground-mounted solar energy installations in the Residential and Neighborhood Business Zoning Districts are allowed by special permit through the Planning Board.
 - D. Standalone energy storage systems may be constructed in any zoning district by special permit through the Planning Board.
- B. The provisions in this section of the Zoning Bylaw shall apply to the construction, operation, repair, and/or removal of all solar energy installation and standalone energy storage system installations, and to physical modifications that materially alter the type, configuration or size of these installations or related equipment

- (3) Revising the definition of Adequate Screening and Buffer Strip in Section 220-74 of the Zoning Bylaw, to read as follows:

ADEQUATE SCREENING

Shall consist of a vegetative barrier, fencing and/or other appropriate materials to provide visual and aural protection to abutting properties.

BUFFER STRIP

A strip of land between a ground mounted solar photovoltaic installation or a standalone energy storage system, including any structures accessory thereto, and the boundary of a parcel, reserved for plant material, berms, walls or fencing to serve as a visual barrier.

- (4) Inserting a new definition for Standalone Energy Storage Systems in Section 220-74 of the Zoning Bylaw, as follows:

STANDALONE ENERGY STORAGE SYSTEM

A system that is capable of absorbing energy from the electric grid, storing it for

a period of time and thereafter distributing electricity, and having a nameplate capacity of less than ten (10) megawatts.

(5) Striking the word "National" in Section 220-76.1(8) of the Zoning Bylaw and inserting, in place thereof, the word "Massachusetts", such that the provision reads as follows:

- (8) One- or three-phase line electrical diagrams detailing the installation, associated components and electrical interconnection methods with all Massachusetts Electrical Code-compliant disconnects and overcurrent devices;

(6) Inserting a new Section 220-77 of the Zoning Bylaw, as follows:

§ 220-77. Standalone energy storage system installations

A. Purpose.

- (1) The purpose of this section is to facilitate the creation of new standalone energy storage system installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, minimize impacts on environmental, scenic, natural and historic resources, and to provide adequate financial assurance for the eventual decommissioning of such installations.
- (2) Subject to the requirements below, standalone energy storage system installations are allowed by special permit from the Planning Board in all zoning districts.

B. Site plan review.

- (1) All standalone energy storage system installations shall require site plan review under the Zoning Bylaw. The Building Inspector shall not issue a building permit unless, and until, the Planning Board submits a site plan approval document to the Building Inspector.
- (2) A building permit will be issued by the Building Inspector that shows evidence the project is consistent with state and federal building codes, the findings and directives of the site plan approval, and local bylaws and regulations, including those set forth by the Conservation Commission. As-built plans shall be submitted prior to final inspection to the Building Inspector with copies to the Planning Board.
- (3) In addition to a building permit, standalone energy storage systems require an electrical permit, and a permit from the Fire Chief in accordance with 527 CMR 1.00, Chapter 52.

C. Conditions. The Planning Board may impose any conditions upon site plan approval deemed necessary to achieve the purpose of this bylaw, such as, but not limited to, the following:

- (1) Reduced setback and buffer strip requirements that allow such installations to be erected without causing impact to the character of the surrounding neighborhood.
- (2) Modification of exterior appearance;

- (3) Limitation of size or extent of facilities;
- (4) Regulation of traffic and site plan features;
- (5) Screening of premises from view by use of appropriate walls, fencing or buffer strips;
- (6) Limitation of sound levels;
- (7) Control of the number, location, size and lighting of signs;
- (8) Additional design and siting modifications where appropriate.

D. Utility notification. Evidence shall be provided at the time of the application for the site plan review that the utility company that operates the electrical grid where the installation is to be located has been informed of the applicant's intent to construct a standalone energy storage system installation and that approval to connect to the grid has been granted or appropriate application(s) have or will be made to such utilities for interconnection. Off- grid systems shall be exempt from this requirement. Reasonable efforts should be made to place all utility connections underground, depending on appropriate soil conditions, shape and topography of the site.

E. Fees. An application for a site plan review shall be accompanied by the required fee. The applicant will also be responsible for payment of any consultants requested by the Planning Board to provide professional review, including legal counsel. The Planning Board may require the applicant to deposit with the Planning Board in advance a reasonable amount to provide for such review, the use of which shall be governed by MGL c. 44, § 53G.

F. Setbacks

(1) Setbacks.

- (a) Front yard. The front yard setback shall be at least 50 feet in all districts.
- (b) Side yard. The side yard setback shall be at least 50 feet in all districts.
- (c) Rear yard. The rear yard setback shall be at least 50 feet in all districts.

(2) All inverters, regardless of type, transformers or other equipment that have the potential to exceed allowed decibels will be located no less than 100 feet from property lines, regardless of the zoning district.

G. Required documents. In addition to documents required for site plan review, the following will be required for energy storage system installations. The Planning Board may waive one or more of these requirements in its sole discretion under appropriate circumstances.

- (1) All plans and maps shall be prepared, stamped and signed by a professional engineer licensed to practice in Massachusetts;
- (2) All plans and maps shall show property lines, physical features, and infrastructure, including roads used to access the property site;
- (3) Proposed changes to landscape of site, including grading,

- vegetation, tree removal, planting of screening vegetation, location of structures;
- (4) Locations of wetlands and priority habitat areas defined by the Natural Heritage and Endangered Species Program;
 - (5) Locations of floodplains or periodically inundated areas subject to moderate- or high- hazard dams;
 - (6) A list of any hazardous materials proposed to be located on the site plan to prevent their release to the environment as appropriate;
 - (7) Drawings of the installation showing the proposed layout of the system and any potential shading from nearby structures;
 - (8) One- or three-phase line electrical diagrams detailing the installation, associated components and electrical interconnection methods with all Massachusetts Electrical Code-compliant disconnects and overcurrent devices;
 - (9) Documentation of the major system components to be used, including battery technology, mounting systems, inverters, etc.;
 - (10) Name of property owner, address, telephone number, e-mail;
 - (11) Name of lessor or lessee, address, telephone number, e-mail;
 - (12) Name of contact person, address, telephone number, e-mail;
 - (13) Name of design engineer, address, telephone number, e-mail;
 - (14) Names of contractors, address, telephone number, e-mails;
 - (15) Name of installer, address, telephone number, e-mail;
 - (16) Zoning district designation for parcel of land, map and parcel;
 - (17) Documentation of actual or proposed access to the project site sufficient to allow for construction and operation and maintenance of the proposed standalone energy storage installation;
 - (18) Provision for water that may be needed for fire protection;
 - (19) Description of the financial surety that is required in the following section: Financial security;
 - (20) Sight line representations depicting in profile the view of the proposed installation, and any appurtenant structures, from the location upon any public road within 300 feet that would have the most unobstructed view of the installations, and from the closest wall of each residential building within 300 feet of the highest point of the installation;
 - (21) A decommissioning plan that describes the removal of all structures, electrical infrastructure or other equipment, the location or repository for all demolition debris, and plans for site re-use or restoration; and
 - (22) A security plan that depicts the appropriate security fencing, lighting, surveillance system and signage.

- H. Design standards. The Planning Board may waive one or more of these requirements in its sole discretion under appropriate circumstances.
- (1) Lighting and security. Lighting of standalone energy storage system installations shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as any appurtenant structures, shall be limited to that required for safety and operational purposes and shall be reasonably shielded from abutting properties. Where feasible, any required lighting shall be directed downward and shall incorporate full cutoff fixtures to reduce light pollution, in compliance with § 220-36 of the Zoning Bylaw. Surveillance and security cameras shall be shielded from viewing abutting private property or invading the privacy of any abutting residential property owner.
 - (2) Signage. All signs shall comply with the Zoning Bylaw and shall not be used for displaying any advertising except to identify the owner and/or operator of the standalone energy storage system installation and a twenty-four-hour emergency contact telephone number.
 - (3) Land clearing. Clearing of natural vegetation shall be limited to what is necessary for construction, operation and maintenance of the installation. Any land disturbance shall be subject to stormwater management criteria and by applicable laws, regulations and bylaws.
 - (4) Safety, emergency service and environmental standards. The applicant shall provide a copy of the project summary, electrical schematic and site plan. The applicant shall develop an emergency response plan, including showing all means of shutting down the standalone energy storage system installation. The applicant shall submit the name of the person answerable to inquiries throughout the life of the installation. If the designated person changes, the name of the new designated person shall be submitted as an addendum.
 - (5) Monitoring and maintenance.
 - (a) The applicant shall submit a plan for the operation and maintenance of the installation which shall include measures for maintaining the site, including safe access, stormwater control, structural repairs and the integrity of security measures. These measures must be acceptable to the Fire Chief and emergency medical services personnel. If needed, training of service personnel will be provided by the applicant. The owner/operator shall be responsible for the cost of maintaining the installation.
 - (b) The applicant shall also submit a Monitoring/Inspection Form under the site plan review during construction and shall further submit a report to the Building Inspector on the condition of the structure and site by January 15 each year.
 - (6) Visual impact. Any energy storage system installation shall be

designed to minimize visual impacts, including preserving natural vegetation to the maximum extent possible, blending in equipment with the surroundings, and adding vegetative buffers to screen abutting residential properties whether developed or not. Siting shall be such that the view of the standalone energy storage system installation from other areas of Town shall be as minimal as possible.

- (7) Height. The height of any structure associated with a standalone energy storage system installation shall not exceed 15 feet.
- (8) Roads. All access roads and interior roads shall be constructed to minimize grading, removal of stone wall or trees, and to minimize impacts to environmental or historic resources.
- (9) Hazardous materials. Hazardous materials that are stored, used or generated on site shall not exceed the amount for a "Very Small Quantity Generator of Hazardous Waste" as defined by the Department of Environmental Protection (DEP) pursuant to 310 CMR 30.000 and shall meet all requirements of the DEP and Massachusetts Contingency Plan, including storage of hazardous materials in a building with an impervious floor that is not adjacent to any floor drains to prevent discharge to the outdoor environment. If hazardous materials are utilized within the energy storage equipment, then impervious containment areas capable of controlling any release to the environment and to prevent potential contamination of groundwater are required.
- (10) Noise.
 - (a) Noise generated by a standalone energy storage system installation, and by any associated equipment and machinery, shall conform to applicable state and local noise regulations, including the DEP's Division of Air Quality noise regulations, 310 CMR 7.10. The site shall not produce any other vibration, harmonics or interference which would be perceived or impact the normal function of electronics off site.
 - (b) The MassDEP noise regulation is contained in 310 CMR 7.10. According to MassDEP, a source of sound violates the Department's noise regulation, if the source:
 1. Increases the broadband sound level by more than 10 dB(A) above ambient; or
 2. Produces a "pure tone" condition: when a sound pressure level, at any given octave band center frequency, exceeds the levels of the two adjacent octave bands by three or more decibels.
 - (c) The MassDEP criteria are evaluated both at the property line and at the nearest inhabited residence or other sensitive land use. "Ambient" is defined as the background A-weighted sound level that is exceeded 90% of the time, measured during equipment operating hours.

(d) Prior to the issuance of a certificate of occupancy, the applicant shall conduct a test of ambient conditions during startup and provide a report of decibel levels for the inverters. Facility noise level shall not exceed the existing DEP regulation. If necessary, mitigation measures will be determined by the Board and the costs of such measures will be borne by the applicant.

I. Modifications. All modification requests to a standalone energy storage system installation, including changes in technology, addition to number of energy storage containers or change in placement made after issuance of the required building permit, shall require review through the site plan review for compliance with this bylaw.

J. Discontinuance and removal. Absent notice of proposed date of decommissioning or written notice of extenuating circumstances, the standalone energy storage system installation shall be considered discontinued when it fails to operate for more than one year without the written consent of the Planning Board. Upon written request from the Building Inspector addressed to the contact address provided and maintained by the owner and operator as required *above*, the owner or operator shall provide evidence to the Building Inspector demonstrating continued use of the installation. Failure to provide such evidence within 30 days of such written request shall be conclusive evidence that the installation has been discontinued. The owner or operator shall physically *remove* the installation no more than 150 days after the date of discontinuance or the proposed date of decommissioning operations. The owner or operator shall notify the Planning Board and Building Inspector by certified mail of their proposed date of discontinued operations and plans for removal. The notification shall consist of the methodology of physical removal of all structures, equipment, security barriers and transmission lines, disposal of all solid and hazardous waste, and stabilization or revegetation of the site. If the owner or operator fails to *remove* the installation in accordance with the *above* criteria, the Town may, after the receipt of an appropriate court order or consent of the property owner, enter the property and physically *remove* the installation at the owner's expense. As a condition of the site plan review, a property owner shall agree to allow the Town entry to *remove* an abandoned or decommissioned installation. The cost for such removal will be charged to the property owner and shall constitute a lien upon the land in accordance with the provisions of MGL 139, § 3A, or other applicable law.

K. Financial security. Proponents of standalone energy storage system projects shall provide a form of surety, either through an escrow account, bond or otherwise, to *cover* the cost of removal in the *event* the Town must *remove* the installation and remediate the landscape, in an amount and form determined to be reasonable by the Site Plan Review Authority, but in no

event to exceed more than 125% of the cost of removal and compliance with the additional requirements set forth herein. Such surety will not be required for municipally or state-owned facilities. The project owner/operator shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal cost due to inflation. The Town shall deposit the surety in accordance with the requirements of MGL c. 44, § 5381/2.

- (7) Renumber the existing Section 220-77 of the Zoning Bylaw, "Inclusionary uses and conflicts", as Section 220-78;

And

- (8) Amend the Use Regulation Schedule at Section 220-8 of the Zoning Bylaw, 220 Attachment 1, by adding a new Section 220-8.6, Subpart J, in the appropriate alphabetical order, to read as follows:

Item	Use	Zoning Districts						Notes
		R	NB	LI	LI2	GI	EZ	
J.	Standalone Energy Storage Systems	PB	PB	PB	PB	PB	PB	

or act in any manner relating thereto.

Voted: 3 Opposed

The moderator declared that the article passed. with a 2/3 majority.

Amanda J Cannon
Town Clerk

A True Copy Attest