

TOWN CLERK

SHARON, MASSACHUSETTS 02067

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TAKEN FROM THE MINUTES OF THE ANNUAL TOWN MEETING MAY 1, 2023

ARTICLE 28

VOTED:

That the Town vote to amend Section 7.7 the Zoning By-Laws of the Town of Sharon, regarding Solar Energy Systems, exactly as printed on pages 67 through 74 of the Warrant for this Annual Town Meeting, with the exception of the words "or take any other action related thereto."

7.7 SOLAR PHOTOVOLTAIC INSTALLATIONS.

- **7.7.1 Purpose.** The purpose of this Section is to authorize and regulate solar photovoltaic installations by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations such that these standards address public safety, minimize impacts on scenic, natural and historic resources. It is understood that the intent is to provide guidance to facilitate safe and successful installations with clear review standards and provide adequate financial assurance for the eventual decommissioning of such installations for municipal projects when deemed necessary by Section 7.7.19.
- **7.7.2 Applicability.** This Section applies to all solar photovoltaic installations, as defined herein, proposed to be constructed after the effective date of this Section. This Section also pertains to physical modifications that materially alter the type, configuration, or size of these installations or related equipment.

7.7.3 Definitions.

Solar Photovoltaic Installation (SPI): For the purposes of Section 7.7, the following definitions shall apply:

Ground-Mounted Solar Photovoltaic Installation (GSPI): All ground-mounted solar photovoltaic installations, including solar photovoltaic installations on new canopies constructed for the principal purpose of supporting such installation.

Rated Nameplate Capacity: The maximum rated output of electric power production of the Photovoltaic system in Direct Current (DC).

Solar Canopies: A Canopy is any device, fixed or retractable, of any material, which extends over or otherwise covers a sidewalk, courtyard, walkway, eating area, driveway, parking lot, building or other area or space whether that area or space is intended for pedestrians, vehicles or other purposes.

Solar Energy: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

Solar Energy System, Ground-Mounted: A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (small-, medium- or large-scale) and includes solar canopies.

Solar Energy System, Small-Scale: A Solar Energy System that occupies 1,750 square feet of surface area or less (equivalent to a rated nameplate capacity of about 10 kW DC or less).

Solar Energy System, Medium-Scale: A Solar Energy System that occupies more than 1,750 but less than 40,000 square feet of surface area (equivalent to a rated nameplate capacity of about 11 - 249 kW DC).

Solar Energy System, Large-Scale: A Solar Energy System that occupies more than 40,000 square feet of surface area (equivalent to a rated nameplate capacity of about 250kW DC or greater).

Solar Energy System, Roof-Mounted: A Solar Energy System that is structurally mounted to the roof of a building or structure; may be of any size (small-, medium- or large-scale). Note that all Roof-Mounted Solar Energy Systems are allowed subject to full-compliance with all applicable State Building Code and local zoning regulations.

7.7.4 USE REGULATION TABLE

SE RECUEATION TABLE	Rural-1 Rural-2	Suburban 1, 2 Professional A, B	Single Res. A&B	Business A, B, C, D	Light Industrial	Municipal
PRINCIPAL USE				1		
Medium-Scale Ground- Mounted or Ground- Mounted Canopy Solar Energy System	SPR	SPR	SPR	SPR	Y	Y
Large-Scale Ground- Mounted or Ground- Mounted Canopy Solar Energy System	SPR	SPR	SPR	SPR	SPR	SPR
Roof-Mounted Solar Energy System	Y	Y	Υ	Υ	. Y	Y
ACCESSORY USE						
Roof-Mounted Solar Energy System	Y	Y	Y	Y	Y	Υ .
Small-Scale Ground- Mounted Solar Energy System	Y	Υ	Y	Y	Y	Υ
Medium-Scale Ground- Mounted or Canopy Solar Energy System	SPR	SPR	SPR	SPR	SPR	SPR
Large-Scale Ground- Mounted or Canopy Solar Energy System	SPR	SPR	SPR	SPR	SPR	SPR

- 7.7.5 Dimensional and Density Requirements. The GSPI shall meet the dimensional requirements of this Section:
 - 1. Principal Structure Setback: A principal structure GSPI shall be set back from the rear and side property lines consistent with the applicable regulations for the zoning district or districts it lies within. The front setback for solar canopies shall be equal to the height of the canopy for municipally-owned properties. All other GSPI's must meet the front setback requirements for principal uses in the zoning district they lie within.
- 2. Accessory Structure Setback: Accessory structure GSPIs shall be set back from the rear and side property lines consistent with the applicable regulations for the zoning district it lies within. Accessory structure GSPIs cannot be located in front of the primary structure on or within the required front setback for the zone it lies within, whichever is more restrictive, except on municipally-owned properties. The front setback for solar canopies shall be equal to the height of the canopy for municipally-owned properties All such accessory structures, including but not limited to, equipment shelters, storage facilities, transformers, substations shall be architecturally compatible with each other and shall be landscaped and screened from view by vegetation, located underground, or behind berms, and/or clustered to minimize visual impacts.

Height

1.0 Ground Mounted Solar: 20 feet for all GSPIs.

1.1 Exemptions

- 1.1.1 Mechanical equipment and appurtenances necessary to the operation or maintenance of the building or structure itself, including chimneys, ventilators, plumbing vent stacks, cooling towers, water tanks, broadcasting and television antennae and roof-mounted solar energy systems.
- **7.7.6 Compliance with Laws, By-laws and Regulations.** The construction and operation of SPI shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, environmental, Wetlands Protection Act, construction, electrical, and communications requirements. All buildings and fixtures forming part of a solar photovoltaic installation shall be constructed in accordance with the State and/or Local Building Code. No SPI shall be constructed, installed or modified without a building permit.
- **7.7.7 Site Plan Approval Required.** Large and Medium SPI shall be constructed, installed, used and modified in conformity with a site plan approved by the Planning Board in accordance with Section 7.7.8 of this Bylaw and the further requirements set forth herein. All plans and maps shall be prepared, stamped and signed by a Professional Engineer and a Professional Land Surveyor, licensed to practice in the Commonwealth of Massachusetts.
- **7.7.8 Contents.** The applicant shall provide a site plan containing the following information and all other information listed below:
 - 1. Property lines and physical features, including structures and roads, for the project site signed and certified by a Professional Land Surveyor licensed to practice in the Commonwealth of Massachusetts.
 - 2. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, wetlands, and wetland buffers, Stormwater Pollution Prevention Plan (SWPPP), existing and proposed utilities, exterior lighting, site drainage, screening vegetation or structures.
 - 3. Blueprints or drawings of the solar photovoltaic installation signed by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts showing the proposed layout of the system and any potential shading from nearby structures.
 - 4. The applicant provide the Planning Board with a copy of the application for an interconnection provided to the local distribution utility (Eversource or National Grid) and provide evidence of approval from the utility when granted. One- or three-line electrical diagram detailing the solar photovoltaic installation, associated components,

and electrical interconnection methods, with all Massachusetts Electric Code (527 CMR 12.00) compliant disconnects and overcurrent devices.

- 5. Documentation of the major system components to be used, including the photovoltaic panels, mounting system, battery energy storage system and inverter;
- 6. Name, address, and contact information for proposed system installer;
- 7. Name, address, phone number and signature of the project proponent, as well as all co-proponents or property owners, if any.
- 8. The name, contact information and signature of any agents representing the project proponent.
- 9. How land clearing and construction shall be performed in accordance with this By-law and the General By-laws governing storm water discharges, provision for handling toxic or hazardous materials, and post-construction storm water runoff, proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, screening vegetation or structures. Note that land clearing requires a Stormwater Pollution Prevention Plan, as delineated in the General By-Laws of the Town of Sharon. If wetlands or resource areas are present on the lot, identification of resource area limits and associated buffers shall be required.
- 10. Documentation of actual or prospective access and control of the project site.
- 11. An operation and maintenance plan for the stormwater system, any infrastructure on the site and the overall site including landscaping, fencing and other site features.;
- 12. Zoning district designation and flood zone designation for the parcel(s) of land comprising the project site (submission of a copy of a zoning map with the parcel(s) identified is suitable for this purpose).
- 13. Proof of liability insurance written by companies licensed to provide such insurance in Massachusetts and with coverage limits at commercially acceptable levels.
- 14. Description of financial surety that satisfies Section 7.7.19. It is understood that the intent is to provide guidance to facilitate safe and successful installations with clear review standards and provide adequate financial assurance for the eventual decommissioning of such installations for municipal projects.
- 15. Public outreach plan, including a project development timeline, which indicates how the project proponent will meet the required site plan approval notification procedures and otherwise inform abutters and the community.
- 16. No large-scale solar photovoltaic installation (SPI) shall be constructed until evidence has been given to the site plan review authority that the utility company that operates the electrical grid where the installation is to be located has been informed of the solar photovoltaic installation owner's or operator's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- 17. The project proponent shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the proposed solar photovoltaic installation.

The Planning Board may require additional information, data or evidence as it deems necessary pursuant to the site plan approval process, or may waive documentary requirements as it deems appropriate.

- **7.7.9 Professional Review.** The Planning Board may engage, at the applicant's expense, professional and technical consultants, including legal counsel, to assist the Board with its review of the application, in accordance with the requirements of M.G.L. c. 44, s. 53G. The Board may direct the applicant to deposit funds with the Board for such review at the time the application is accepted, and to add additional funds as needed upon notice. Failure to comply with this section shall be good grounds for denying the application. Upon approval of the application, any excess amount in the account attributable to that project, including any interest accrued, shall be repaid to the applicant.
- **7.7.10 Site Control.** The project proponent shall submit documentation of actual or prospective access and control of the project site sufficient to allow for construction and operation of the large or medium SPI.
- 7.7.11 Operation and Maintenance Plan. The project proponent shall submit a plan for the operation and maintenance of the SPI, which shall include measures for maintaining safe access to the installation, storm water controls, snow removal, waste removal and general procedures for operational maintenance of the installation. Note that land clearing requires a Stormwater Pollution Prevention Plan, as delineated in the General By-Laws of the Town of Sharon.
- **7.7.12 Utility Notification.** No large or medium-scale SPI shall be constructed until evidence has been given to the Planning Board that the utility company that operates the electrical grid where the installation is to be located has been informed of the SPI owner's or operator's intent to install an interconnected customer owned generator. Off-grid systems shall be exempt from this requirement.
- 7.7.13 Performance Standards. The SPI shall meet the following performance standards, as applicable below:
 - 1. Lighting. Lighting of an SPI shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as accessory structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties, as per Section 6.5.4 lighting standards
 - 2. Signage. Signs on SPI shall comply with the requirements of all applicable sign regulations, and shall be limited to:
 - a. Those necessary to identify the owner, provide a 24-hour emergency contact phone number, and warn of any danger.
 - b. Educational signs providing information about the SPI and the benefits of renewable energy.
 - c. Signs shall be limited to two dimensions (i.e. flat) and shall not be electronic or lighted.
 - 3. Advertising. SPI shall not be used for displaying any advertising except for identification of the manufacturer or operator of the SPI.
 - 4. Utility Connections. Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the SPI underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
 - 5. Screening. A buffer or green strip planted with live shrubs or trees, predominantly evergreen, shall if feasible be maintained between the perimeter of the SPI and any abutting property line or street unless the existing natural growth is adequate to provide an equivalent buffer. Such a buffer shall be designed so as not to create a hazard upon entrance or exit from the facility. Site screening may also be accomplished through fencing, if approved by the Planning Board. The Planning Board may vary or waive this requirement consistent with minimizing negative effects on abutting property.

7.7.14 Safety and Environmental Standards.

- 1. Emergency Services. The SPI owner or operator shall provide a copy of the project summary, electrical schematic and approved site plan to the Fire Chief, when site plan review is required. Upon request the owner and/or operator shall cooperate with local emergency services in developing an emergency response plan, which may include ensuring that emergency personnel have immediate, 24-hour access to the facility. All means of shutting down the SPI shall be clearly marked.
- 2. Land Clearing. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation and maintenance of the SPI or otherwise prescribed by applicable laws, regulations, and bylaws.
- 3. Groundwater Protection. A SPI shall comply with the requirements set forth in the General By-laws governing stormwater management, which requirements shall be imposed and conditioned as appropriate through the Site Plan Approval process. No SPI shall be required to obtain an independent special permit under either section.
- 7.7.15 Monitoring and Maintenance. The SPI owner and/or operator shall maintain the facility in good and safe working condition, and shall schedule inspections by a competent professional at least once every twelve (12) months or more often, pursuant to industry standards and practice. The results of the inspection and any resulting repair work shall be submitted to the Planning Board or its assignee and the Inspector of Buildings within thirty (30) days of receipt by the owner or operator. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. Site access shall be maintained to a level acceptable to the Fire Chief and emergency medical services. The owner and operator shall be responsible for the cost of maintaining the SPI and any access road(s), unless accepted as a public way.
- **7.7.16 Modifications.** All material modifications to a SPI made after issuance of the required building permit shall require prior approval by the Planning Board or its assignee.
- **7.7.17 Contact.** The owner and operator of a large or medium SPI shall each identify a responsible person for emergency purposes and public inquiry and shall at all times throughout the life of the installation maintain current contact information (name, address, telephone number, e-mail address) for such person(s) on file with the Inspector of Buildings, the Fire Chief, and the Planning Board.
- 7.7.18 Discontinuance and Removal. Any GSPI that is not an accessory structure to a principal residential structure, not in operation for a period of one hundred and eighty (180) continuous days or more without written permission from the Planning Board, shall be considered discontinued and shall be removed. Upon written request from the Inspector of Buildings 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 Inspector of Buildings demonstrating continued use of the GSPI. Failure to provide such evidence within thirty (30) days of such written request shall be conclusive evidence that the installation has been discontinued. The owner or operator of the installation shall notify the Board and Inspector of Buildings by certified mail of the proposed date of discontinued operations and plans for removal within 30 days of the discontinuation of operations. The owner or operator shall physically remove the installation no more than ninety (90) days after the date of discontinued operations, which period may be extended with written permission of the Inspector of Buildings for no more than sixty (60) days. Removal shall consist of:
 - 1. Remove all of the GSPI in its entirety, including all associated structures, equipment, security barriers and transmission lines from the site.
 - 2. Dispose of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
 - 3. Stabilize or re-vegetate the site as necessary to minimize erosion. The Planning Board may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.

- 4. Reinstate gravel or ground cover consistent with the surrounding landscape.
- 5. Remove all above-ground foundations and supports to a depth of one foot below existing grade.

If the owner or operator of the GSPI fails to remove the installation in accordance with the requirements of this section, the Town shall have the right, to the extent it is otherwise duly authorized by law, to enter the property and remove the installation at the expense of the owner of the installation and the owner(s) of the site on which the facility is located. Fees for removal will be the responsibility of the property owner. If payment is not provided, a lien will be placed on the property by the Town of Sharon.

7.7.19 Financial Surety. The owner of an SPI approved in accordance with this Section shall provide to the Town, acting by and through the Planning Board, security to cover the cost of removal only for medium and large-scale municipal solar projects, in the event the Town must remove the SPI and remediate the landscape. Such surety shall be in an amount and form determined to be reasonable by the Board, which may be an escrow account, bond or otherwise, and shall be provided prior to construction. Surety will not be required for municipally-owned facilities, if not deemed necessary by the Planning Board. The project proponent shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer or cost estimator. The amount shall include a mechanism for calculating increased removal costs due to inflation.

2/3 VOTE DECLARED BY MODERATOR.

A True Copy.

ATTEST:

MARK F. HOGAN SHARON TOWN CLERK