

To see if the Town of Saugus will vote to amend the Town's Zoning By-Laws by adding a new Article 20 entitled "Large Scale Ground Mounted Solar Photovoltaic Installations Overlay Districts" that would provide as follows:

A. Amend the Zoning By-law text by adding the following Article 20

B. Amend the Zoning Map by adding the Overlay Maps entitled "Route 107 Overlay-Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay District, Dated March, 2014" prepared by the MAPC, and "DPW Overlay- Large- Scale Ground Mounted Solar Photovoltaic Installations Overlay District Dated March, 2014" prepared by the MAPC, to designate the locations of the Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay Districts.

Proposed text and map are as follows:

## **ARTICLE 20**

### **Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay District**

#### **20.0 Purpose**

The purpose of Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay District Bylaw is to encourage the use of solar energy systems and protect solar access consistent with M.G.L. 40A Section 9B and with the Green Communities Act in M.G.L. 25A Section 10, to increase our local renewable energy production, to decrease our reliance on fossil fuels to produce electricity, and to improve local air quality.

This promotion of commercial solar photovoltaic installations is to be accomplished pursuant to the standards set forth herein for the placement, design, construction, operation, monitoring, modification and removal of such installations that address public safety, scenic, natural and historic resources and provide adequate financial assurance for the eventual decommissioning of such installations.

The provisions set forth in this section shall apply to the construction, operation, and/or repair of large-scale ground-mounted solar photovoltaic installations (LSGMSPI).

#### **20.1 Applicability**

This bylaw applies to large-scale (minimum 250kW rated nameplate capacity) ground-mounted solar photovoltaic installations 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. The requirements of this bylaw shall apply to a solar photovoltaic installation regardless of whether it is the primary use of the property or an accessory use.

This bylaw is not intended to regulate systems of less than 250kW or roof mounted systems.

#### **20.2 Definitions**

**As-of Right Siting:** As-of Right Siting shall mean that development may proceed without the need for a special permit, variance, amendment, waiver, or other discretionary approval. As-of-Right development shall be subject to site plan review to determine conformance with section 12.6 of the Saugus Zoning Bylaw as well as Section 3.4 below.

**Building Inspector:** The Inspector of Buildings, by the Saugus Zoning Bylaw, charged with the enforcement of the zoning bylaw.

**Building Permit:** A construction permit issued by the Building Inspector; the building permit evidences that the project is consistent with the state and federal building codes as well as Saugus Zoning Bylaws, including those governing ground-mounted large-scale photovoltaic installations.

**Designated locations:** The locations designated by this bylaw, in accordance with M.G.L. Chapter 40A, section 5, where ground-mounted large scale solar photovoltaic installations may be sited as-of-right. Said locations are shown on Zoning Maps titled; “Route 107 Overlay-Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay District, Dated March, 2014” prepared by the MAPC, and “DPW Overlay- Large- Scale Ground Mounted Solar Photovoltaic Installations Overlay District Dated March, 2014” prepared by the MAPC, to designate the locations of the Large-Scale Ground Mounted Solar Photovoltaic Installations Overlay Districts, pursuant to M.G.L. 40A section 4. These maps are hereby made a part of this Zoning Bylaw and are on file in the Office of the Town Clerk.

**Large-Scale Ground-Mounted Solar Photovoltaic Installation:** A solar photovoltaic system that is structurally mounted on the ground and is not roof-mounted, and has a minimum nameplate capacity of 250 kW DC.

**On-Site Solar Photovoltaic Installation:** A solar photovoltaic installation that is constructed at a location where other uses of the underlying property occur.

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

**Site Plan Review:** review by the Site Plan review Authority to determine conformance with Saugus zoning ordinance.

**Site Plan Review Authority:** For purposes of this bylaw, Site Plan Review Authority refers to the Saugus Planning Board.

**Zoning Enforcement Authority:** The Building Inspector is the Zoning Enforcement Authority for Saugus

### **20.3 General Requirements for all Large Scale Solar Power Generation Installations**

The following requirements are common to all solar photovoltaic installations to be sited in designated locations.

#### **20.3.1 Compliance with Laws, Ordinances and Regulations**

The construction and operation of all large scale photovoltaic installations shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable environmental, safety, construction, electrical, and communications requirements. All buildings and fixtures forming part of a solar photovoltaic installation shall be constructed in accordance with the State Building Code.

All requirements of the underlying zoning district(s) shall remain in effect except where these regulations supersede or provide an alternative to such requirements. If the provisions of this bylaw are in conflict with any other section of the Saugus Zoning Bylaw, the regulations of the LSGMSPIOD shall govern.

#### **20.3.2 Building Permit and Building Inspection**

No large scale solar photovoltaic installation shall be constructed, installed or, modified as provided in this section without first obtaining a building permit.

#### **20.3.3 Fees**

The application for a building permit for a large scale solar photovoltaic installation must be accompanied by the fee required for a building permit.

#### **20.4 Site Plan Review**

The construction, installation or modification of large scale solar photovoltaic installations shall be subject to site plan review by the Planning Board in accordance with this bylaw. Together with the requirements of Section 12.6 of the Saugus Zoning Bylaw (Site Plan Review), the site plan review authority shall consider and apply the requirements set forth in this bylaw in reviewing and deciding an application for site plan approval. If the provisions of Site Plan Review under this bylaw are in conflict with the Site Plan Review (Section 12.6) of the Saugus Zoning Bylaw, the regulations pertaining to Site Plan Review of the LSGMSPIOD shall apply.

The Planning Board may impose reasonable terms and conditions on the construction, installation or modification of large scale photovoltaic installations, but it shall not have discretionary power to deny the use. The Planning Board shall grant approval with reasonable condition unless, despite best efforts, no form of reasonable conditions can be devised to satisfy the problem with the plan.

##### **20.4.1 Required Documents**

Pursuant to the site plan review process, the project proponent of a Large-Scale Ground-Mounted Solar Photovoltaic Installation shall provide the following documents in addition to the requirements of Site Plan Review, Section 12.6, of the Saugus Zoning Bylaw:

- a) 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;

- b) One or three line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and overcurrent devices;
- c) Documentation of the major system components to be used, including the PV panels, mounting system, and inverter;
- d) Name, address, and contact information for proposed system installer;
- e) Name, address, phone number and signature of any agents representing the project proponent, as well as all co-proponents or property owners, if any;
- f) The name, contact information and signature of any agents representing the project proponent;
- g) Documentation of actual or prospective access and control of the project site (see also Section 3.5);
- h) An operation and maintenance plan (see also Section 20.6);
- i) Zoning district designation for the parcel(s) of land comprising the project site (submission of a copy of the zoning map with the parcel(s) identified is suitable for this purpose);
- j) Proof of liability insurance; and
- k) Description of financial surety that satisfies Section 20.12.3

Upon receipt of an application for site plan review, the Planning Board may engage at the applicant's cost professional and technical consultants including legal counsel to assist with its review of the application in accordance with the requirements of Section 53G of Chapter 44 of the Massachusetts General Laws. The Planning Board may direct the applicant to deposit funds with the Planning 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 grounds for denying the application. Any excess amount in the account attributable to that project, including any interest accrued, shall be repaid to the applicant per their written request.

The Site Plan Review Authority may waive documentary requirements as it deems appropriate.

## **20.5 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 proposed solar photovoltaic installation.

## **20.6 Operation & Maintenance Plan**

The project proponent shall submit a plan for the operation and maintenance of the large-scale ground-mounted solar photovoltaic installation, which shall include measures for maintaining

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safe access to the installation, storm water controls, as well as general procedures for operational maintenance of the installation.

## **20.7 Utility Notification**

No large- scale ground – mounted solar photovoltaic installation 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 or operator’s intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

## **20.8 Dimension and Density Requirements**

### **20.8.1 Setbacks, lot frontage, height**

For large-scale ground-mounted solar photovoltaic installations, minimum lot frontage, minimum front, side and rear setbacks, maximum height, and maximum stories shall be the same as required in the Industrial 1 (I1) zoning district-Table of Dimensional and Density Regulations, Saugus Zoning Bylaw Section 6.8-Other General Dimensional and Density Provisions and accompanying footnotes.

### **20.8.2 Minimum building lot area coverage**

The minimum lot areas shall be the same as required in the Industrial 1 (I1) zoning district.

### **20.8.3 Maximum Building Area**

Maximum building area coverage shall be 85%.

### **20.8.4 Appurtenant Structures**

All appurtenant structures to large- scale ground-mounted solar photovoltaic installations shall be subject to reasonable regulations concerning the bulk and height of structures, lot area, setbacks, open space, parking and building coverage requirements. All such appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other. Whenever reasonable, structures should be shaded from view by vegetation and/or joined or clustered to avoid adverse visual impacts.

## **20.9 Design Standards**

### **20.9.1 Lighting**

Lighting of solar photovoltaic installations shall be consistent with local, state and federal law. Lighting of other parts of the installation, such as appurtenant structures, shall be limited to that required for safety and operational purposes, and shall be reasonably shielded from abutting properties. Where feasible, lighting of the solar photovoltaic installation shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.

### **20.9.2 Signage**

Signs on large-scale ground-mounted solar photovoltaic installations shall comply with the Town of Saugus sign by law. A sign consistent with the Town’s sign bylaw shall be required to identify the owner and provide a 24-hour emergency contact phone number.

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Solar photovoltaic installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the solar photovoltaic installation.

#### **20.9.3 Glare**

Solar panels, to the maximum extent feasible, shall be positioned and landscaped so as not to create glare and minimize glare on surrounding occupied structures.

#### **20.9.3 Utility Connections**

Reasonable efforts, as determined by the Site Plan Review Authority, shall be made to place all utility connections from the solar photovoltaic installation 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.

### **20.10 Safety and Environmental Standards**

#### **20.10.1 Emergency Services**

The large scale photovoltaic installation owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the local fire chief. Upon request the owner or operator shall cooperate with local emergency services in developing an emergency response plan. All means of shutting down the solar photovoltaic installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquires throughout the life of the installation.

#### **20.10.2 Land Clearing, Soil Erosion, Habitat Impacts and landscaping**

A landscaping plan shall be submitted detailing all proposed changes to the landscape of the site, including temporary or permanent roads or driveways, grading, vegetation clearing, planting, screening, vegetation, and lighting. Clearing of natural vegetation shall be limited to what is necessary for the construction, operation, and maintenance of the large – scale ground-mounted solar photovoltaic installation or otherwise prescribed by applicable laws, regulations, and bylaws.

### **20.11 Monitoring and Maintenance**

#### **20.11.1 Solar Photovoltaic Installation Conditions**

The large – scale ground-mounded solar photovoltaic installation owner or operator shall Maintain the facility in good condition. 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 local Fire Chief and Emergency Medical Services. The owner or operator shall be responsible for the cost of maintaining the solar photovoltaic installation and any access road(s), unless accepted as a public way.

#### **20.11.2 Modifications**

All material modifications to a solar photovoltaic installation made after issuance of the required building permit shall require approval by the Site Plan Review Authority.

### **20.12 Abandonment or Decommissioning**

### **20.12.1 Removal Requirements**

Any large –scale ground-mounted solar photovoltaic installation which has reached the end of its useful life or has been abandoned consistent with Section 3.12.2 of this bylaw shall be removed. The owner or operator shall physically remove the installation no more than 150 days after the date of discontinued operations. The owner or operator shall notify the Building Inspector by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:

- (a) Physical removal of all large-scale ground-mounted solar photovoltaic installations, structures, equipment, security barriers and transmission lines from the site.
- (b) Disposal of all solid and hazardous waste in accordance with the local, state, and federal waste disposal regulations.
- (c) Stabilization or re-vegetation of the site as necessary to minimize erosion. The Site Plan Review Authority may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.

### **20.12.2 Abandonment**

Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the solar photovoltaic installation shall be considered abandoned when it fails to operate for more than one year without the written consent of the Building Inspector. If the owner or operator of the large- scale ground-mounted solar photovoltaic installation fails to remove the installation in accordance with the requirements of this Section within 150 days of abandonment or the proposed date of decommissioning, the town may enter the property and physically remove the installation.

### **20.12.3 Financial Surety**

Proponents of large-scale ground-mounted solar photovoltaic projects shall provide a form of surety, either through 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 exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein, as determined by the project proponent. Such surety will not be required for municipally- or state-owned facilities. The project proponent 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 costs due to inflation.

