## Harwich Planning Board Legal Notice - Proposed Zoning Amendment

In accordance with the provisions of MGL c.40A §5, the Harwich Planning Board will hold a public hearing on Tuesday, March 27, 2018 no earlier than 6:30 pm in the Donn B. Griffin Room, Harwich Town Hall, 732 Main Street, Harwich, to consider amendments to the Harwich Zoning Codes:

# ARTICLE: \_ - Zoning Bylaw Article LARGE-SCALE GROUND-MOUNTED PHOTOVOLTAIC ARRAYS

To see if the Town will vote to amend the Town's Zoning Bylaw, by establishing a new Article XXIII, Large-Scale Ground-Mounted Photovoltaic Arrays (>250kW), to include the following subsections:

§325-138 Purpose and Intent.

§325-139 Definitions

§325-140 Large Scale Solar Review.

§325-141 Operation & Maintenance Plan

§325-142 Utility Notification

§325-143 Dimension and Density Requirements.

§325-144 Design Standards.

§325-145 Safety and Environmental Standards.

§325-146 Monitoring and Maintenance

§325-146 Monitoring and Maintenance.

§325-147 Abandonment and Decommissioning.

§325-148 Financial Surety

Further to amend Article III, Establishment of Zoning Districts by adding under:

§325-3 Division of Town into districts, a new "Solar Farm Overlay District"; and,

§325-4 Maps, add "E. Solar Farm Overlay District" and a corresponding map.

#### Further to amend Article V, Use Regulations:

§325-13, Table of Uses, D. Paragraph IV, Commercial Uses and Attachment 1 – Table 1, by adding: 47 - Large-Scale Ground-Mounted Photovoltaic Array (§325-14S, Article XXII) as "P" in the IL zoning district.; and,

§325-14 Supplemental regulations, a new subsection "S. Large-Scale Ground-Mounted Photovoltaic Array shall be permitted by right within the Solar Farm Overlay District pursuant to the provisions of Article XXIII (§325-138 - §325-148).

Any person interested or wishing to be heard on these zoning proposals should appear at the time and place designated. The full text for the proposed amendments can be found on the Town Website <a href="http://www.harwich-ma.gov/planning-board">http://www.harwich-ma.gov/planning-board</a>, and in the Community Development and Town Clerk Offices at Town Hall, at the address noted above, during normal business hours.

Lawrence Brophy, Chair

Cape Cod Chronicle Print Dates: 3/8/18, 3/15/18

# Below is the complete text for the proposed changes related to the Large-Scale Ground-Mounted Photovoltaic Arrays Bylaws – this is ALL new text.

#### **XXIII. Large-Scale Ground-Mounted Photovoltaic Arrays**

§325-138 Purpose and Intent. The purpose of this bylaw is to promote the creation of new Large-Scale Ground Mounted Solar Photovoltaic Installations (250kW or larger and covering at least one acres in size) by providing standards for the placement, design, construction, operation, monitoring, modification and removal of such installations to address public safety, minimize impacts on 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. This section shall apply to Large-Scale Ground-Mounted Solar Photovoltaic Installations proposed for construction after the effective date of this section. This section shall also pertain to physical modifications that materially alter the type, configuration, or size of these installations or related equipment.

#### §325-139 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 may be subject to Large Scale Solar Review to determine conformance with local zoning ordinances or bylaws. Projects subject to Large Scale Solar Review cannot be prohibited, but can be reasonably regulated by the building commissioner or local inspector.

**Designated Location**. The location designated by the Zoning Bylaw, in accordance with Massachusetts General Laws Chapter 40A, section 5, where Large—Scale Ground-Mounted Solar Photovoltaic Installations may be sited As-of-Right. Said location(s) are shown on the Zoning Map of Harwich pursuant to Massachusetts General Laws Chapter 40A Section 4. This map is hereby made a part of this section and is 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. All Large-Scale Ground-Mounted Solar Photovoltaic Installation shall be owned and operated by either the Town of Harwich or under agreements with the Town of Harwich.

**Large Scale Solar Review.** A review by the Planning Board to determine conformance with local zoning ordinances or bylaws.

**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 the electric power production of the photovoltaic system in Direct Current (DC).

**Solar Photovoltaic Array**. an arrangement of solar photovoltaic panels.

§325-140 Large Scale Solar Review. Prior to construction, installation or modification, Large—Scale Ground Mounted Solar Photovoltaic Installations with 250 kW or larger nameplate capacity shall undergo Large Scale Solar Review by the Planning Board as provided below. In accordance with Section 22(c) of the Massachusetts Green Communities Act, Large Scale Solar Review shall be expedited and no decision shall be rendered more than one (1) year after the date of the application.

A. Compliance with Laws, Ordinances and Regulations.

The construction and operation of all Large—Scale Ground-Mounted Solar Photovoltaic Installations shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, electrical, and communications requirements. All buildings and fixtures forming part of the installation shall be constructed in accordance with the State Building Code.

No Large-Scale Ground Mounted Solar Photovoltaic Installation shall be constructed, installed or modified without first obtaining a building permit.

- B. Large Scale Solar Review Application and Plan Requirements. All applications and plans shall be filed with the Planning Board.
  - 1. Two (2) copies of a properly executed application for Large Scale Solar Review, along with a filing fee of \$525.00.
  - 2. Twelve (12) copies of site plan(s), prepared by a Registered Land Surveyor licensed in the Commonwealth of Massachusetts, at a scale of one inch equals forty feet (1" = 40'), including:
    - a. North arrow and locus map;
    - b. Property boundaries;
    - c. Name/Description of project;
    - d. Topography, both existing and proposed, including proposed drainage;
    - e. Zoning designation;
    - f. Location of proposed structures, drives, etc., including setbacks;
    - g. Sign(s) location(s);
    - h. Landscaping, both existing and proposed;
    - i. Lighting, including locations, type and wattage.
  - 3. Twelve (12) copies each of the following:
    - a. Plans or drawings of the Large-Scale Ground-Mounted Solar Photovoltaic Installation prepared by a Registered Professional Engineer licensed 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 Large-Scale Ground Mounted 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(s);
- d. 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;
- e. An operation and maintenance plan (see also §325-141);
- f. Proof of liability insurance;
- g. Description of financial surety that satisfies §325-148;
- h. A public outreach plan, including project development timeline, which indicates how the project proponent will meet the required site plan review notification procedures and other wise inform abutters and the community.
- C. Waiver of Requirements: Upon written request submitted as part of the application, the Planning Board may waive any requirements.
- §325-141 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 safe access to the installation, storm water controls, as well as general procedures for operational maintenance of the installation.
- §325-142 Utility Notification No Large-Scale Ground –Mounted Solar Photovoltaic Installation 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 installation owner or operator's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

#### §325-143. Dimension and Density Requirements.

- A. Setbacks. Setbacks from all boundary lines shall be a minimum of fifty feet (50').
- B. 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.

#### §325-144. Design Standards.

A. Lighting. Lighting of Large-Scale Ground-Mounted 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 Large-Scale Ground-Mounted Solar Photovoltaic Installation shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.

B. Signage. Signs on Large-Scale Ground-Mounted Solar Photovoltaic Installations shall comply with a Harwich Sign Code. A sign that identifies the owner and provides a 24-hour emergency contact phone number shall be required.

Large-Scale Ground-Mounted Solar Photovoltaic Installations shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the installation.

#### C. Utility Connections.

Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections for the Large-Scale Ground-Mounted 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.

## §325-145 Safety and Environmental Standards.

- A. Emergency Services. The Large—Scale Ground-Mounted Solar Photovoltaic Installation owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Harwich 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 installation shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
- B. Land Clearing, Soil Erosion and Habitat Impacts. 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.

# §325-146 Monitoring and Maintenance.

A. Large-Scale Ground-Mounted Solar Photovoltaic Installation Conditions. The Large-Scale Ground Mounted 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 Harwich Fire Chief and Emergency Medical Services. The owner or operator shall be responsible for the cost of maintaining the installation and any access road(s), unless accepted as a public way.

B. Modifications. All material modifications to a Large-Scale Ground-Mounted Solar Photovoltaic Installation made after issuance of the required building permit shall require approval by the Planning Board.

# §325-147 Abandonment and Decommissioning.

- A. 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 §325-147.B 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 Large Scale Solar Review Authority by certified mail of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:
  - 1. Physical removal of all Large-Scale Ground-Mounted Solar Photovoltaic Installations, structures, equipment, security barriers and transmission lines from the site.
  - 2. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
  - 3. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Large Scale Solar 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.
- B. Abandonment. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the Large-Scale Ground-Mounted Solar Photovoltaic Installation shall be considered abandoned when it fails to operate for more than one (1) year without the written consent of the Planning Board. 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.

§325-148 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 Planning Board, but in no event to 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.

# **Article III. Establishment of Zoning Districts**

#### §325-3. Division of Town into districts

Solar Farm Overlay District

# §325-4. Maps.

E. The Solar Farm Overlay District established hereunder is shown on a map labeled "Town of Harwich, Solar Farm Overlay District" dated February \_\_\_\_\_, 2018, a copy of which is on file in the office of the Town Clerk.

# **Article V. Use Regulations**

§325-13, Table of Uses, D. Paragraph IV, Commercial Uses and Attachment 1 – Table 1

Use	RR	RL	RM	RH-1	RH-2	RH-3	CV	CH-1	CH-2	IL	MRL	MRL-1	WR
Paragraph IV – Commercial Uses													
47 Large-Scale Ground- Mounted Photovoltaic Array (§325- 14S, Article XXII)	-	-	-	-	-	-	-	-	-	Р	-	-	-

# §325-14 Supplemental regulations.

S. Large-Scale Ground-Mounted Photovoltaic Array shall be permitted by right within the Solar Farm Overlay District pursuant to the provisions of Article XXIII (§325-138 - §325-148).

