

## SECTION II ZONING DISTRICTS

2.0 TYPES OF DISTRICTS

For the purposes of this bylaw, the Town of Westhampton is hereby divided into the following types of use districts:

- AR - Agricultural/Residential
- FPD - Floodplain District
- WS - Water Supply Protection District
- SPD - Solar Photovoltaic District (Overlay)

## SECTION III – PRINCIPAL USE SECTION

3.0 SCHEDULE OF USE REGULATIONS

TABLE I – WESTHAMPTON SCHEDULE OF USE REGULATIONS					
BYLAW NUMBER	LAND USE CLASSIFICATION	STANDARDS & CONDITIONS	ZONING DISTRICT		
			AR	FPD	WS
	<u>GENERAL USES</u>				
3.096	Roof Mounted Photovoltaic System		Y	Y	Y
3.097	Ground Mounted Photovoltaic System		See Section 5.10		

## SECTION V – SPECIAL REGULATIONS

5.10 Ground-Mounted Solar Photovoltaic installations

5.100 Purpose - The purpose of this Section is to provide standards for the placement, design, construction, operation, monitoring, modification and removal of Ground-Mounted Solar Photovoltaic installations that address public safety and minimize impacts on scenic, natural and historic resources.

## 5.101 Applicability

- a. This Section applies to all 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.

- b. All Ground Mounted Solar Photovoltaic Installations (including Large Scale) shall require a Special Permit and Site Plan Approval issued by the Planning Board in accordance with this section and Section 6.3, except that:
  - i. Within the Solar Photovoltaic Overlay District only, Ground Mounted Solar Photovoltaic Installations (including Large Scale) are permitted As-of Right Siting (subject to Site Plan Approval) when the lot coverage of all of the arrays, structures and buildings do not exceed an aggregate of 1.5 acres. The calculation of the lot coverage area shall exclude required setbacks and wetlands. The combined area of multiple installations (new or existing) on a single lot, or adjacent lots in common ownership shall be used to determine accordance with the 1.5 acre threshold.

#### 5.102 General Requirements for all Ground Mounted Solar Photovoltaic Installations

- a. Site Plan Review - All ground-mounted solar photovoltaic installations shall undergo site plan review by the Site Plan Review Authority prior to construction, installation or modification as provided in this Section. For the purpose of this Section of the Zoning Bylaw, the Planning Board shall be the Site Plan Review Authority.
  - i. General - All plans and maps shall be prepared, stamped and signed by a Professional Engineer licensed to practice in the Commonwealth of Massachusetts.
  - ii. Required Documents - Pursuant to the site plan review process, the Project Proponent shall provide the following documents:
    - a) A site plan showing:
      - (1) Property lines and physical features, including roads, for the project site;
      - (2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, 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) One- or three-line electrical diagram detailing the solar photovoltaic installation, associated components, and electrical interconnection methods, with all Massachusetts Electrical Code compliant disconnects and overcurrent devices;
      - (5) Documentation of the major system components to be used, including the PV panels, mounting system, and inverter;
      - (6) Name, address, and contact information for proposed system installer;
      - (7) Name, address, phone number and signature of the Project Proponent;
      - (8) The name, contact information and signature of any agents representing the Project Proponent;
    - b) Stormwater management plan

- c) Erosion & sediment control plan
- d) Documentation of actual or prospective access and control of the project site;
- e) An operation and maintenance plan;
- f) Proof of liability insurance and builder's risk insurance;
- g) A public outreach plan, including a project development timeline, which indicates how the project proponent will meet the required site plan review notification procedures and otherwise inform abutters and the community.
- h) 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.
- i) Operation & Maintenance Plan - The Project Proponent shall submit a plan for the operation and maintenance of the 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.
- j) Abandonment & Decommissioning Plan – The Project Proponent shall submit a Decommissioning Plan. Any Photovoltaic Generating Installation which has reached the end of its useful life or has been abandoned (i.e. when either it fails to be completed within a commercially reasonable time (such that power generation can commence), or it fails to operate for an elapsed time of more than one year without the written consent of the Planning Board) shall be removed. The owner or operator shall physically remove the installation within 150 days of abandonment or the proposed date of decommissioning. The owner or operator shall notify the Planning Board by certified mail of the proposed date of discontinued operations and plans for removal. The Abandonment & Decommissioning Plan shall include a detailed description of how all of the following will be addressed:
  - (1) Physical removal of all structures; equipment, building, security barriers and transmission lines from the site, including any materials used to limit vegetation.
  - (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 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) Financial surety for decommissioning - Proponents of Solar Electric Generating Facilities shall provide a form of surety, either through escrow account, bond or other form of surety approved by the Planning Board to cover the estimated 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 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 and the Town. Such surety will not be required for municipal or state-owned facilities. The project proponent shall submit a fully inclusive detailed itemized cost estimate of the town's estimated costs (including "prevailing wages") associated with removal and full decommissioning of the facility and site, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation at the end of the facility's useful life. Said estimated cost shall not include or deduct the value of material recycling. Said surety in its full amount shall be presented to the Planning Board prior to the Project Proponent applying for Building Permits or the commencement of construction
- (5) All legal documents required to enable the Town to exercise its rights and responsibilities under the plan to decommission the site, enter the property and physically remove the installation.
- b. Utility Notification - No 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 Project Proponent's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- c. Dimension and Density Requirements - Ground-mounted solar photovoltaic installations shall comply with the same dimension and density requirements required in the underlying district in Section 6-20, except that for such facilities of 250 kw or greater the following shall apply:
- i. Front, rear and side yard setbacks shall be a minimum 50 feet
  - ii. Access roads or driveways shall be setback at least 25 feet from side and rear lot lines.
- d. Structures - All structures for large-scale ground-mounted solar photovoltaic installations shall be subject to existing bylaws. All appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other.
- e. Visual Impact Mitigation - The plan for a ground-mounted solar photovoltaic

installation shall be designed to maximize the preservation of on-site and abutting natural and developed features. In natural (undeveloped) areas, existing vegetation shall be retained to the greatest extent possible, especially where such vegetation provides a benefit to the natural environment. In developed areas, the design of the installation shall consider and incorporate human-designed landscape features to the greatest extent, including contextual landscaping and landscape amenities that complement the physical features of the site and abutting properties. Whenever reasonable, structures should be screened from view by vegetation and/or joined or clustered to avoid adverse visual impacts and be architecturally compatible with each other. Vegetation shall be of varieties native to New England and a mix of deciduous and evergreen species. Vegetative screening shall reach a mature form to effectively screen the installation within five years of installation. The mature height of the vegetated screening shall be such that the installation's structures are not apparent to a person upon any public road and viewing the installation from a height of 10 feet. Planting of the vegetative screening shall be completed prior to final approval of the photovoltaic installation by the Building Inspector.

- f. Design Standards - Projects shall be designed to:
  - i. minimize the volume of cut and fill, the number of removed trees 10" caliper or larger, the length of removed stone walls, the area of wetland vegetation displaced, the extent of stormwater flow increase from the site, soil erosion, and threat of air and water pollution
  - ii. maximize pedestrian and vehicular safety both on the site and entering and exiting the site;
  - iii. minimize obstruction of scenic views from publicly accessible locations;
  - iv. minimize visual intrusion by controlling the visibility of parking, storage, or other outdoor service areas viewed from public ways or premises residentially used or zoned;
  - v. minimize glare from headlights and light trespass;
  - vi. Ensure adequate access to each structure for fire and service equipment and adequate provision for utilities and stormwater drainage.
  - vii. Site 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 installations shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution.
  - viii. Signage – No signage on ground mounted solar photovoltaic installations is permitted other than those required to identify voltage and electrocution hazards as well as the owner, and provide a 24-hour emergency contact phone number. 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.

- ix. 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.

g. Safety and Environmental Standards

- i. Emergency Services - The ground mounted solar photovoltaic installation Project Proponent shall provide a copy of the project summary, electrical schematic, and site plan to the local fire chief. Upon request the Project Proponent 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 Project Proponent shall identify a responsible person for public inquiries throughout the life of the installation.
- ii. 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 ground mounted solar photovoltaic installation or otherwise prescribed by applicable laws, regulations, and bylaws. Such installations shall not occur on any slopes greater than 15% in order to minimize erosion. No more than 50% of the land parcel utilized for ground mounted solar photovoltaic installations shall contain land requiring clearing of forest.
- iii. No topsoil shall be removed from the land parcel under consideration for ground mounted solar photovoltaic installations. If earthworks operations are required, topsoil shall be stockpiled within the property bounds and protected against erosion until such time earthwork operations are completed and topsoil can be re-spread over parcel. Earthworks shall be planned to limit export of soil material (non-topsoil) to 1000 cubic yards per acre affected by installation. A detailed earthworks estimate is a required submittal component proving this quantity is maintained.
- iv. Impact on Agricultural and Environmentally Sensitive Land - The Photovoltaic Generating Installation shall be designed to minimize impacts to agricultural and environmentally sensitive land and to be compatible with continued agricultural use of the land whenever possible. No more than 50-percent of the total land area proposed for the solar electric field may be occupied by the solar panels, with the remainder of the land remaining as undeveloped open space left in its natural state.
- v. Vegetation Management - Herbicides, pesticides, or chemical fertilizers shall not be used to manage vegetation at the Photovoltaic Generating Installation.

Mowing, grazing or using geotextile materials underneath the solar array are possible alternatives. In the Aquifer Protection District, low growing grasses are optimal. Other grasses must be regularly mowed or grazed so as to minimize the amount and height of "fuel" available in case of fire.

- vi. All land associated with the ground-mounted solar installation shall be covered and grown in natural vegetation. All ground surface areas beneath solar arrays and setback areas shall be pervious to maximize on-site infiltration of stormwater. Impervious paving of areas beneath solar arrays is prohibited. To the greatest extent possible, a diversity of plant species shall be used, with preference given to species that are native to New England. Use of plants identified by the most recent copy of the "Massachusetts Prohibited Plant List" maintained by the Massachusetts Department of Agricultural Resources is prohibited. Herbicides shall be applied only by properly licensed personnel in conformance with all applicable state regulations.
- h. Monitoring and Maintenance
  - i. Solar Photovoltaic Installation Conditions - Project Proponent shall maintain the facility in good condition. Maintenance shall include, but not be limited to, painting, structural repairs, fencing and integrity of security measures. Site access shall be maintained to a level acceptable to the local Fire Chief and Emergency Medical Services. The Project Proponent shall be responsible for the cost of maintaining the solar photovoltaic installation and any access road(s), unless accepted as a public way.
  - ii. 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.
- i. Outside Consultant Fees – In addition to the normal filing fee, the Planning Board can charge the applicant with a fee to hire "outside consultants" to assist the Board in administering and reviewing applications.
- j. Waivers - The Planning Board may, upon the prior written request of the applicant and by a ¾ majority affirmative vote of the full complement of the Board, waive any of the requirements of this sub-section, but must state their reasons for doing so in writing as part of their decision.

## SECTION VII - DEFINITIONS

### 7.01 Term Definitions

As-of-Right Siting: The siting of a development may proceed without the need for a special permit or other discretionary approval. However, development shall be subject to site plan review to determine conformance with local zoning ordinances, bylaws, federal and state building codes,

and to protect the public health, safety and welfare. Siting of projects cannot be prohibited, but can be reasonably regulated by the local building **inspector**, local inspectors, and a designated Site Plan Review Authority.

Building **Inspector**: The lead person in a municipal building department. All other inspectors are deemed to be local inspectors in accordance with MGL, chapter 143, & section 3 & 3A. The building **inspector** is also the zoning enforcement officer.

Building Permit: A construction permit issued by an authorized local building **inspector**; the building permit affirms that the project is consistent with the state and federal building codes as well as local zoning bylaws.

Project Proponent: The applicant, property owner, facility developer, operator and management entity, jointly and severally, of a project. Each of the responsible parties shall be responsible for adhering to the requirements set forth in this By-Law.

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

Site Plan Review: A review by the Site Plan Review Authority to determine conformance with local zoning ordinances or bylaws.

Site Plan Review Authority: The person or group designated as such by the applicable section of the bylaw to perform Site Plan Reviews.

Solar Photovoltaic Installation, Ground Mounted: A solar photovoltaic system that is structurally mounted on the ground and is not roof-mounted.

Solar Photovoltaic Installation, Large-Scale Ground-Mounted: A solar photovoltaic system that is structurally mounted on the ground and is not roof-mounted, and has a rated nameplate capacity greater than 250 KW DC.

Solar Photovoltaic Installation, Roof Mounted: A solar photovoltaic system that is structurally mounted on the roof of a building.

Special Permit: A permit issued by a special permit granting authority pursuant to provisions of this bylaw and of Section 9 of the Zoning Act to permit uses, structures or structural alterations which are in harmony with the general purposes of this bylaw and which shall be subject to general of specific provisions as therein set forth and to conditions, safeguards and limitations which may be imposed by the special permit granting authority.

Special Permit Granting Authority: The Special Permit Granting Authority shall be specifically identified in the applicable sections of the Zoning Bylaws. Where the SPGA is not specifically identified, then the Planning Board shall be the SPGA.