ARTICLE : To see if the Town will vote to Amend the Zoning Bylaw:

(1) BY RENUMBERING EXISTING "SECTION 16" of the Zoning Bylaw such that

EXISTING "SECTION 16" IS RENUMBERED "SECTION 17" AND

(2) BY ADDING A NEW "SECTION 16" entitled "Solar Bylaw" as follows:

Section 16 Solar Bylaw

16.1 Purpose

The purpose of the Solar Bylaw is to provide standards and guidelines for the installation of solar photovoltaic (PV) and solar Thermal Systems in the Town of Marion, while protecting public health, safety, and welfare and preserving the character of the Town.

16.2 Definitions

1. ***Solar Systems*** -- (hereinafter "System(s)") installed in Marion, whether roof or ground mounted shall include any engineered and constructed structure that converts sunlight into (1) electrical energy (PV Systems) through an array of solar panels that connect to a building's electrical system or to the electrical grid, or (2) heat energy (Thermal Systems) through an array of solar panels that heats water to be used on site.
2. ***Size of Solar Panel*** – All size limitations cited herein shall apply to the full-face areas of an array of solar panels themselves, not their projected areas on roofs or ground.
3. ***Solar Panel*** - A panel is any part of a System that absorbs solar energy for use in the system's energy transformation process.
4. ***Accessory Use*** – An accessory use is a feature that is sized and designed to support the primary function of the buildings located on the property
5. ***Photovoltaic*** - The technology that uses a semi-conductor material to convert light directly into electricity.
6. ***Solar Farm*** - Solar Farms are Systems designed for the primary purpose of generating power for the sale to third parties via the electric grid. These Systems can be roof-mounted systems or ground-mounted systems that may or may not have accessory structures on the same lot.
7. ***Applicant*** - For the purposes of this Bylaw, "Applicant" may include: (1) fee owners of real property who also own the System or (2) fee owners of real property who intend on leasing the System to a third party pursuant to a legally binding instrument or (3) third parties who are not the fee owners of the real property but who have obtained written permission from the fee owners of the real property to submit an application for a System pursuant to the terms and conditions of this Bylaw.

16.3 Applicability: General Standards for Solar Systems

The following represents the general standards that shall apply to Systems installed pursuant to the provisions of this Bylaw.

1. Systems and Solar Panels shall be placed and arranged such that reflected solar radiation or glare shall not be directed onto adjacent buildings, properties or roadways.

2. A System shall not be used to display advertising, including signage, streamers, pennants, spinners, reflectors, ribbons, tinsel, balloons, flags, banners, or similar materials, with the exception of the following:
    a. Necessary equipment information, warnings, or indication of ownership shall be allowed on any equipment of the System or where required by the Building Code.

3. No System or any of its components shall be illuminated, except to the degree minimally necessary for public safety and/or maintenance and only in compliance with the Marion Zoning Bylaw.

4. All Systems shall be considered either a "structure" or an "accessory structure" as defined in the Marion Zoning Bylaw and shall have setbacks on all sides in accordance with existing zoning requirements as stated in the Dimensional Requirements Table found within Section 5.1 of the Marion Zoning Bylaw or as further defined in this Bylaw.

5. A System installation shall limit the visual and other impacts on the adjacent properties. The Systems shall be screened from ground and water level view of the line of sight from public ways or waterway and adjacent properties by appropriate year-round landscaping, fencing, screening, or other type of buffers consistent and compatible with the character of the neighborhood where the System is located.

6. Large-scale clearing of forested areas for the purpose of constructing Systems is prohibited.

7. No System shall be used or constructed such that it becomes a private or public nuisance or hazard, and no System shall be abandoned or not maintained in good order and repair. Any System that is deemed a private or public nuisance or hazard or otherwise abandoned or not maintained in good order and repair shall be removed from the property at the property owner's sole expense.

8. Storm water and snowmelt runoff and erosion control shall be managed in a manner consistent with all applicable federal, state and local regulations and shall not impact neighboring properties.

9. Wall mounting or any other form of face mounted System on any building or structure is prohibited in all zoning districts.

10. Utility Connections: All electrical work shall be in accordance with the National Electrical Code and the Massachusetts Building Code and have received all applicable permits including but not limited to environmental permits as may be required. All power transmission lines from a ground-mounted System to any building or other structure shall be located underground unless otherwise required by the State Building Code or impeded by special ground site conditions.

11. Any deviation from the requirements set forth in Design Standards for all Districts shall be subject to a Streamlined Special Permit Process as defined in Section 16.9.

16.4 Applicability: Roof-Mounted System

1. Roof-mounted Systems may be installed in all Zoning Districts by an Applicant, requiring only that a building permit has been issued by the Marion Building Commissioner and that the System conforms to the Marion Zoning Bylaw and to Sections 16.4.2, 16.4.3, and 16.4.4, below.
2. Within Residential Districts, roof-mounted Systems shall conform to existing roof contours, extending not more than 12 inches above roof surfaces. Roof-mounted Systems shall be set back a minimum of 8 inches from all roof edges (eaves, gutter line, ridge) of the roof surface and 24 inches from adjacent roof or abutting roof or walls of adjoining property. All residential flat roof systems shall conform to requirements of 16.3.6.
3. Flat roof mounted systems shall have a 4 ft. (four) set back from the edge of the building perimeter. Screening is not a requirement.
4. In non-Residential Districts, roof-mounted solar panels as part of the System may be installed at angles of up to 50 (fifty) degrees from the horizontal on flat roofs (defined as having a roof pitch less than 2 inches per foot). The top most points of the solar panels shall not exceed a total height of 4 (four) feet above the roof surface. On a pitched roof system (roof pitch equal or greater than 2 (two) inches per foot, the top most point of the solar panel shall not exceed 2 (two) feet measured perpendicular to the roof surface. Systems shall be set back from building edge a minimum of 4 (four) feet. All these systems are considered to be building-mounted mechanical systems and shall meet all requirements thereof. All flat roof systems shall conform to requirements of 16.4.3, above.

16.5 Applicability: Ground Mounted System in Non-Residential Districts

This section of the Bylaw applies to ground-mounted Systems not classified as Solar Farms.

1. Ground-mounted Systems equal to or less than 900 s.f. or 1.5% of lot size, whichever is larger, may be installed by an Applicant via issuance of a building permit by the Marion Building Commissioner.

2. A solar panel array greater than 900 s.f. or 1.5% of lot size, whichever is larger, with a maximum System size of 1500 square feet shall be reviewed and approved by the Planning

Board pursuant to the provisions of Section 16.9 (Streamlined Special Permit) and is subject to a Minor Site Plan Review (Section 16.7).

3. A solar panel array greater than 1500 s.f. shall be reviewed and approved by the Planning Board pursuant to the provisions of Section 16.9 (Streamlined Special Permit) and is subject to Major Site Plan review (16.8).

4. The maximum height above ground level of any portion of the system shall be 6 (six) feet, measured as the vertical distance from the mean natural grade on the street side(s) and, if not abutting a street, from the mean natural ground level along the System's designated front yard, as said front yard is designated by the Building Commissioner.

5. The system shall be screened from view from adjacent residential properties.

16.6 Applicability: Ground-Mounted System in Residential Districts

This section of the Bylaw applies to ground-mounted Systems for onsite electrical use.

1. A solar panel array limited in size to 600 square feet (600 s.f.) or 1.5% of lot size, whichever is larger, may be installed after obtaining a building permit from the Building Commissioner.

2. System(s) greater than 600 s.f. or 1.5% of lot size, whichever is larger, shall have been reviewed and approved by the Planning Board pursuant to the provisions of Section 16.9 (Streamlined Special Permit) and to a Minor Site Plan Review (Section 16.7). A solar panel array greater than 600 s.f. or 1.5% of lot size, whichever is larger, with a maximum System size of 1500 square feet shall be reviewed and approved by the Planning Board pursuant to the provisions of Section 16.9 (Streamlined Special Permit) and is subject to a Major Site Plan Review (Section 16.8).

3. The maximum height above surrounding ground level of any portion of the system shall be 6 (six) feet measured as the vertical distance from the mean natural grade on the street side(s) and, if not abutting a street, from the mean natural ground level along the System's designated front yard, as said front yard is designated by the Building Commissioner.

4. At the expense of the Applicant, all parties in interest shall be notified of the Planning Board meeting during which a Minor Site Plan Review application is to be held pursuant to the provisions of G.L. c.40A, s.11 notwithstanding that a public hearing shall not be required.

16.7 Minor Site Plan Review and Approval

Where required by this Bylaw (Section 16, et seq.), submission to the Planning Board for Minor Site Plan Review and Approval pursuant to Section 9.1.1 of the Zoning Bylaw shall be as set forth herein and regardless of the minimum threshold requirements found in Section 9.1.1. In

addition to the submission requirements found in Section 9.1.1 of the Zoning Bylaw, the Planning Board may require, where in its sole judgment it deems relevant, the submission of one or three-line electrical diagrams detailing solar PV Systems, associated components, electrical interconnection methods, all National Electrical Code compliant disconnects and overcurrent devices, documentation of major System components to be used, including PV panels, mounting System, and inverter(s).

16.8 Major Site Plan Review and Approval

Where required by this Bylaw (Section 16, et seq.), submission to the Planning Board for Major Site Plan Review and Approval pursuant to Section 9.1.2 of the Zoning Bylaw shall be as set forth herein and regardless of the minimum threshold requirements found in Section 9.1.2. In addition to the submission requirements found in Section 9.1.2 of the Zoning Bylaw, the Planning Board may require, where in its sole judgment it deems relevant, the submission of one or three-line electrical diagrams detailing solar PV Systems, associated components, electrical interconnection methods, all National Electrical Code compliant disconnects and overcurrent devices, documentation of major System components to be used, including PV panels, mounting System, and inverter(s), the designed annual electrical output of the System and evidence of the annual on-site consumption in watt-hours. In addition, the Planning Board may require the Applicant to provide the name, address, and contact information of proposed System installer, the name, contact information and signature of any agents representing the project proponent, require the provision of evidence of site control, evidence of utility notification, an operation and maintenance plan, emergency response plan, and a description of financial surety.

16.9 Streamlined Special Permit

Certain Systems regulated by this Bylaw may be subjected to a Streamlined Special Permit procedure that obviates the need to comply with the four enumerated filing requirements contained in Section 7 of the Zoning Bylaw (Special Permit Requirements) and G.L. c.40A, s.9 of the Zoning Act as noted below. Specifically, where this Bylaw designates an application to be subject to a Streamlined Special Permit, a special permit from the Planning Board pursuant to Section 7 of the Zoning Bylaw shall be required, however the requirements of (1) a traffic study; (2) an environmental impact study, (3) a storm water study, and (4) a peer review by the Town's engineer shall not be required.

16.10 Modifications to Existing Systems

Additions and alterations to any system lawfully in existence as of the effective date of this Bylaw shall conform to the requirements of this Bylaw. All the provisions of this Bylaw, including review pursuant to Streamlined Special Permit Section 16.9 shall apply to any modification, expansion or alteration to or of, a System installed or constructed pursuant to this Bylaw or any System preexisting the effective date of this Bylaw.

16.11 Solar Farms

Ground-mounted Solar Farms are allowed in Residential Districts under the following conditions:

1. In addition to requirements provided elsewhere in this Bylaw, System(s) within a Solar Farm shall be subject to review and approval by the Planning Board pursuant to the provisions of Section 16.8, (Major Site Plan Review and Approval);

2. System(s) within a Solar Farm shall require receipt of a Special Permit as defined in Section 7 of the Marion Zoning Bylaws.

3. Solar Farms shall be located on lots with a minimum of three contiguous acres (no less than 130,680 square feet).

4. Systems within Solar Farms shall comply with setbacks according to the Marion Zoning Bylaw except where an adjacent property has or could have a dwelling unit(s) within 100 feet of the System, in which case the setback must be a minimum of 100 feet along adjacent property lines. Access paths around the perimeter of the System may be located in the setback area.

5. The maximum height of the ground-mounted solar arrays, support structures and any local berm below the structures shall be limited to eight (8) feet above the mean natural grade on the street side(s) and, if not abutting a street, from the mean natural ground level along the System's designated front yard, as said front yard is designated by the Planning Board.

6. The Planning Board shall be the Special Permit granting authority. All modifications to a Solar Farm made after issuance of the Special Permit shall require approval by the Planning Board in accordance with the existing process for modifications to Special Permits.

7. The following additional conditions apply and shall be included with an application for a Special Permit and Major Site Plan review for a Solar Farm:

    a. The name and affiliation of the electrical engineers or electricians who will design the connection to the grid or load.
    b. Property lines for the subject property and all properties adjacent to the subject property within 300 feet.
    c. A plan view to scale with elevations and sight line representations that shall include:
        1. The System, all existing buildings, including description of existing use, if known (e.g., residence, garage, accessory structure and so forth) located on the property and on all adjacent properties located within 300 feet of the proposed Solar Farm.
        2. Distances, at grade, from the proposed Solar Farm to each structure shown on the vicinity plan as well as a plan for screening.

d. All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.
e. A map or plan, as required, showing the connection to the grid or load, as applicable.
f. Colored photographs or Google Earth or equivalent view of the current conditions and view of the site from at least 4 locations from the north, south, east, and westerly directions shall be submitted.
g. Material safety data sheets identifying the presence of any hazardous or potentially hazardous materials.

16.12 Abandonment or Discontinuation of Use of Solar Farms

1. At such time as the holder of a special permit issued or subsequent owner (s) elects to abandon or discontinue the use of the Solar Farm, the holder shall notify the Planning Board by certified mail, return receipt requested, of the proposed date of abandonment or discontinuance. In the event that a holder fails to give such notice, the Solar Farm facility shall be considered abandoned or discontinued if the Solar Farm has not been operational for 180 days unless the Planning Board has authorized an extension pursuant to G.L. c.40A, s.9.
2. Upon abandonment or discontinuation of use, the owner shall physically remove the Solar Farm facility within 120 days from the date of abandonment or discontinuation of use. For good cause shown this period may be extended at the request of the holder of the special permit at the discretion of the Planning Board. "Physically remove" shall include, but not be limited to:

a. Removal of the Solar Collection Panels frames, supporting structures, foundations, electrical equipment, and connections, all other equipment, equipment shelters and vaults, security barriers and all appurtenant structures from the Solar Farm site,
b. Proper disposal of all solid or hazardous materials and wastes from the site in accordance with local and state solid waste disposal regulations,
c. Restoration of the location of the Solar Farm facility site to its natural condition except that any landscaping consistent with the character of the site and neighborhood may remain.

16.13 Financial Surety, Removal, Decommissioning, and Abandonment of Solar Farms

Prior to the issuance of a special permit or Building Permit for any Solar Farm Ground-mounted System is otherwise permitted pursuant to this Bylaw, an escrow agreement (the "Escrow Agreement") in form and substance acceptable to the property owner and the Planning Board shall be executed by the Applicant for said special permit or Building Permit, the property owner, and an Escrow Agent (such party to be acceptable to the property owner, the Applicant, and the Planning Board), with the Town of Marion named as a third party beneficiary under such Escrow Agreement. The Escrow Agreement shall require, among other things, that the Applicant shall deposit a specified sum of money in an escrow account (the "Escrow Account") to be held by the Escrow Agent. The Escrow Agent shall be a financial institution that regularly acts as an "escrow agent" or "trustee".

The Escrow Amount shall be sufficient to cover the estimated cost to the property owner to remove the facility in full and remediate the landscape. Where the Applicant is not the property owner, the Escrow Agreement shall contain a provision to the satisfaction of the Planning Board, that any funds released from the Escrow Account following the expiration or earlier termination of the lease between the property owner and the Applicant shall (i) first be used by the property owner solely to complete said removal and remediation up to the amount set forth in the lease, (ii) second, to be used by the property owner to complete any additional removal and remediation as prescribed by the Planning Board (and consented to by the property owner) up to the amount set forth in the Escrow Agreement; (iii) and any excess be returned to the Applicant.

The Escrow Amount shall be established by the Applicant to the satisfaction of the Planning Board and the property owner based upon the Applicant's delivery of a fully inclusive estimate of the costs (the "Removal Cost Estimate") associated with said removal and remediation (such amount not to be less than the amount set forth in the lease), prepared by a qualified engineer. The Removal Cost Estimate shall be re-evaluated every seventh (7th) anniversary of the Building Permit by the Applicant's designated engineer and, in the event of any adjustments to said Removal Cost Estimate that are approved in writing by both the Planning Board and the property owner, the Escrow Amount shall be correspondingly adjusted to reflect such updated Removal Cost Estimate. Within 90 days of each said 7th anniversary, the property owner shall confirm in writing to the Planning Board the continued compliance and fully funded status of the Escrow Account in satisfaction of this condition.

Any System that does not comply with the above noted requirements, including the re-evaluation requirements governing the Removal Cost Estimate and any System that has been abandoned or not used for a two years or more shall be deemed to no longer comply with the Marion Zoning Bylaws and shall be subject to the enforcement and penalty provisions of civil and criminal laws of the Town of Marion and Commonwealth of Massachusetts.

16.14 Utility Notification Regarding Solar Farms

Prior to the issuance of a building permit for the construction of a Solar Farm, the Solar Farm applicant shall provide the Building Commissioner with documentation that the utility company that operates the electrical grid where the Solar Farm is to be located has executed a non-contingent, binding and enforceable utility interconnection agreement with the Solar Farm owner and applicant for the electrical generation of the Solar System.

16.15 Changes in Ownership Regarding Solar Farms

Once a Special Permit for a Solar Farm has been approved, the applicant shall duly record a copy of the Special Permit with the Plymouth County Registry of Deeds. All subsequent deeds to the property shall refer to the Special Permit and incorporate it by reference. All conditions under which the Special Permit was originally granted shall be binding on all successive owners and operators of the property.

16.16 Severability of Provisions

The provisions of this Bylaw are severable. If any provision of this Bylaw is held invalid, the other provisions shall not be affected thereby. If the application of this Bylaw or any of its provisions to any person or circumstance is held invalid, the application of this Bylaw and its provisions to other persons and circumstances shall not be affected thereby.

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