

ZONING ORDINANCE TEXT AMENDMENTS SOLAR ENERGY SYSTEMS

TOWNSHIP OF SUMMERFIELD COUNTY OF MONROE STATE OF MICHIGAN

INSERT six new definitions in alphabetical order into Section 2.20 DEFINITIONS

Abandoned solar energy system. Any Solar Energy System that remains nonfunctional or inoperative to the extent that it is not used to generate electrical energy for a continuous period of 180 days.

Building integrated photovoltaic system. A combination of photovoltaic building components integrated into any building envelope system such as vertical facades including glass and other façade material, semitransparent skylight systems, roofing materials, and shading over windows.

Photovoltaic Device. A system of components that generates electrical energy from incidental sunlight by means of photovoltaic effect, whether or not the device is able to store the electric energy produced for later use.

Solar array. Any number of photovoltaic devices connected together to provide a single output of electrical energy or other energy.

Solar energy system - large. A utility-scale solar energy system where the primary use of the land is to generate electric energy or other energy by converting sunlight, whether by photovoltaic devices or other conversion technology, for the sale, delivery or consumption of the generated energy by more than one end-user, and typically the power output of that system is equal to or greater than 1 megawatt. Large solar energy system may be a primary or an accessory use.

Solar energy system - small. A solar energy system where the sole use is to generate electric energy or other energy by converting sunlight, whether photovoltaic devices or other conversion technology, primarily for consumption by a single end user at the same property upon which the solar energy system is located. The power output of the system shall not exceed 150 kilowatts. Small solar energy systems shall only be an accessory use to a primary use.

INSERT new General Provisions #3.300 Building Integrated Photovoltaic System to ARTICLE 3 GENERAL PROVISIONS

3.300 BUILDING INTEGRATED PHOTOVOLTAIC SYSTEM

The purpose and intent of this regulation is to allow by-right new integrated technologies to be deployed on buildings that do not impact the aesthetic appearance of the building or structure and may not be noticeable to the average resident looking at the structure. No zoning approval is required for building integrated photovoltaic systems.

INSERT new use #16 Solar Energy Systems - Small to SECTION 4.20 PRINCIPAL USES PERMITTED (AG-1 District)

16. Solar Energy Systems, Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM - SMALL

INSERT new use #16 Solar Energy Systems - Small to SECTION 5.20 PRINCIPAL USES PERMITTED (AG-2 District)

16. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM - SMALL

INSERT new use #13 Solar Energy Systems - Small to SECTION 6.20 PRINCIPAL USES PERMITTED (R-1 District)

13. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use #10 Solar Energy Systems - Small to SECTION 7.20 PRINCIPAL USES PERMITTED (R-2 District)

10. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use #10 Solar Energy Systems - Small to SECTION 8.20 PRINCIPAL USES PERMITTED (RM District)

10. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use #13 Solar Energy Systems - Small to SECTION 9.20 PRINCIPAL USES PERMITTED (C-1 District)

13. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use #10 Solar Energy Systems - Small to SECTION 9A.20 PRINCIPAL USES PERMITTED (C-2 District)

10. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use #9 Solar Energy Systems - Small to SECTION 10.20 PRINCIPAL USES PERMITTED (I-1 District)

10. Solar Energy Systems - Small, when developed in accordance with Section 15.350 – SOLAR ENERGY SYSTEM- SMALL

INSERT new use # 22 Solar Energy Systems - Large to SECTION 10.30. USES PERMITTED WITH SPECIAL APPROVAL (I-1 District)

22. Solar Energy System - Large when developed in accordance with Section 15.360 – SOLAR ENERGY SYSTEMS, LARGE

RENUMBER Use #22 Warehousing in SECTION 10.30 USES PERMITTED WITH SPECIAL APPROVAL (I-1 District)

23. Warehousing.

INSERT new 15.350 Solar Energy System – Small to ARTICLE 15. LAND USE DEVELOPMENT STANDARDS 15.350 SOLAR ENERGY SYSTEM - SMALL

1. Intent. The purpose of these regulations is to regulate the construction, location, and operation of small solar energy systems that are accessory uses to a site's primary use and subject to reasonable conditions that will protect the public health, safety, and welfare.
2. Accessory Use. The Solar Energy System – Small shall be considered an accessory use to a principal use allowed within the zoning district.
3. Location. Small solar energy systems shall not be constructed or installed in the front yard of any lot.

4. Size. For residentially zoned parcels, ground mounted systems may not exceed 1,000 square feet in area utilized for solar panels and electrical equipment. For all other zoning districts, ground mounted systems may not exceed 10,000 square feet in total area.

5. Height.

a) Roof Mounting: In residentially zoned districts, small solar energy systems attached to pitched roofs may not extend above the existing peak of the roof. In commercially and industrial zoned districts, small solar energy systems attached to flat roofs may not extend more than five feet above the parapet, and they must be setback three feet from edges of the roof. In any event, the solar array shall not exceed the maximum building height for the zoning district in which it is located.

b) Ground Mounting: small solar energy systems cannot be constructed in any required setback area. Greenbelts and landscape screening shall be required to screen the small solar energy system from adjoining properties and roadways.

6. Buffering. All small solar energy systems shall be buffered by the planting of shrubs measuring 36-48 inches (36-48") tall at planting along the length of the each of the sides of the area utilized for solar panel arrays. The shrubs shall be planted on five-foot centers.

**INSERT new 15.360 Solar Energy System - Large to ARTICLE 15. LAND USE DEVELOPMENT STANDARDS
15.360 SOLAR ENERGY SYSTEM - LARGE**

1. Intent. The purpose of these regulations is to allow and promote the use of renewable energy as an alternative energy source and to provide associated place, land development, installation, and construction regulations for large solar energy systems facilities subject to reasonable conditions that will protect the public health, safety, and welfare. These regulations establish minimum requirements for large solar farm facilities while promoting a renewable energy source in a safe, effective, and efficient manner.

2. Minimum Lot Size. Ten (10) acres of industrially zoned land.

3. Height Restrictions. For ground mounting, all photovoltaic panels and support structures located on a large solar energy system facility shall be restricted to a maximum height of twelve (12) feet when orientated at a maximum tilt as measured from the existing grade. For roof mounting, large solar energy systems attached to flat roof, arrays may not extend more than five feet above the parapet, and they must be setback three feet from edges of the roof. In any event, the solar array shall not exceed the maximum building height for the I-1 Industrial District.

4. Setbacks. All photovoltaic solar panels and support structures associated with such facilities (excluding perimeter fencing) shall be setback a minimum of forty feet (40') from a side or rear property line and sixty-five feet (65') front yard setback. All solar arrays and electrical equipment must be setback not less than sixty-five feet (65') from any adjacent residential structure.

5. Maximum Lot Coverage. Maximum lot coverage restrictions shall not apply to photovoltaic solar panels. Any other regulated structures on the parcel are subject to the maximum lot coverage restrictions of the underlying zoning district.

6. Safety/Access. A six (6) foot tall security fence shall be placed around all electrical equipment not included on the individual solar panel arrays. The use of barbed wire and electrical fences are expressly prohibited.

7. Noise. No large solar energy systems shall exceed fifty-five (55) dBA as measured at the property line.

8. Glare. Large solar energy system facilities shall be located or placed so that concentrated solar glare shall not be directed toward or onto adjoining properties or roadways at any time of the day.

9. Landscaping. The special approval use application for large solar energy systems shall include a proposed landscaping and screening and buffering plan prepared by a licensed landscape architect. This plan will be reviewed through the special approval use review procedures process to assure that the proposed facility is appropriately landscaped in relation to adjacent land uses and road rights-of-way.

10. Electrical Interconnections. The use of above ground transmission lines is prohibited within the site.

11. Additional Standards for Special Approval Uses. In addition to the special approval use and site plan requirements found in Article 13 (Standards for Special Approval Uses) and Article 14 (Site Plan Review), the applicant shall address the following topics in the application for large solar energy system applications:

a) Project Description and Rationale: Identify the type, size, rated power output, performance, safety and noise characteristics of the system including the transmission line/grid connection for the project. Identify the project construction time frame, project life, developmental phases (and potential future expansions) and expected markets for the generated energy.

b) Analysis of On-site Traffic: Estimated construction jobs and estimated permanent jobs associated with the development.

c) Visual Impacts: Graphically demonstrate the visual impact of the project using photos and renderings of the project with consideration given to setbacks and proposed landscaping.

d) Environmental Analysis: Identify impacts on surface water quality and any impacts to County drains and/or established natural and private drainage features in the area.

e) Waste: Identify any solid or hazardous waste generated by the project.

f) Lighting: Provide plans showing all lighting within the facility. No light may adversely affect adjacent parcels. Site lighting shall not exceed 0.1 footcandles when adjacent to residentially used property or 1.0 footcandles on any other property.

g) Transportation Plan: Provide a proposed access plan during construction and operational phases. Show proposed project service road ingress and egress locations onto adjacent roadways and the layout of the facility service road system. Due to infrequent access following construction, it is not required to pave or curb the solar panel access drive.

h) Public Safety: Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to the general public that may be created.

i) Sound Limitations: Identify noise levels at the property lines of the project when completed and operational.

j) Telecommunications Interference: Identify any electromagnetic fields and communications interference that may be generated by the project.

k) Abandonment and Decommissioning: Following the operational life of the project, or at the time the project becomes obsolete or an Abandoned Solar Energy System, as determined by the Township Building Official or any other expert or specialist to be designated by the Township to make such a determination, the applicant shall perform decommissioning and removal of the Large Solar Energy System and all its components. The Applicant shall prepare a Decommissioning Plan and submit it to the Planning Commission for review and approval prior to issuance of the Special Approval Use Permit. Under this plan, all structures and facilities shall be removed, including any structures below-grade, and removed offsite for disposal. No concrete, piping and other materials may be left in place. Any Solar Array or combination of Photovoltaic Devices that become an Abandoned Solar Energy System shall be removed under the Decommissioning Plan. The ground must be restored to its original condition within 180 days of becoming an Abandoned Solar Energy System, or decommissioning, whichever occurs first. If decommissioning is not completed within a 180-day period, the Township Board shall have the authority to complete any decommissioning and restoration activities necessary to restore the property to the condition in existence prior to the installation of the Large Solar Energy System or any components thereof. Any costs incurred by the Township in pursuing such activities shall be at the expense of the Applicant. The Decommissioning Plan shall include the life of the project, estimated decommissioning costs net of salvage value in current dollars, and method of ensuring that funds will be available for decommissioning and restoration.

l) Continuing Security: If any Large Solar Energy System is approved for construction under this Section, the applicant shall post decommissioning security prior to the start of construction (in a mutually agreed upon form) for an amount necessary to accomplish the work specified in the decommissioning plan as agreed upon by the Township and applicant. The amount shall be reasonably sufficient to restore the property to its previous condition prior to construction and operation of the Large Solar Energy System. Such financial security shall be kept in full force and effect during the entire time that the Large Solar Energy System exists or is in place, and such financial security shall be irrevocable and non-cancelable.

(1) Continuing Obligations: Failure to keep any required financial security in full force and effect at all times while a Large Solar Energy System exists or is in place shall constitute a material and significant violation of the Special Approval Use Permit and this Ordinance, and will subject the Large Solar Energy System, applicant, owner and operator to all remedies available to the Township, including any enforcement action, civil action, request for injunctive relief, and revocation of the Special Approval Use Permit.

m) Transfer of Ownership/Operation: Prior to a change in the ownership or operation a Large Solar Energy System, including, but not limited to, by the sale or lease of that System or the underlying property, the current owner or operator shall provide written notice to the Township at least sixty (60) days prior to that change becoming effective. This notice shall inform the Township of the intended transfer of control of the Large Solar Energy System, and shall include a copy of the instrument or agreement effecting that transfer. Such an instrument or agreement shall include an express statement that the new owner or operator of the Large Solar Energy System shall not be permitted to operate that System until compliance with the terms of this Ordinance has been established.

n) Township Review: Because of the ever-changing technical capabilities of the photovoltaic solar panels and of new technology in general, the Township Planning Commission shall have the authority to review and consider alternative in both the dimensional and physical requirements in this Section as a part of the special approval use review process.

INSERT new 14.20.9 Buildings, Structures, and Uses Requiring Site Plan Review to ARTICLE 14. SITE PLAN REVIEW

9. Solar Energy Systems – Large