

**TOWNSHIP OF STURGIS
ST. JOSEPH COUNTY MICHIGAN**

ORDINANCE NO. 2018-1

ADOPTED: October 1, 2018

EFFECTIVE: October 22, 2018

An Ordinance to add provisions for large solar energy systems to the Township Zoning Ordinance, to include definitions and standards for special use approval for large solar energy systems, to provide an effective date, and to repeal all ordinances or parts of ordinances in conflict herewith.

**THE TOWNSHIP OF STURGIS
ST. JOSEPH COUNTY, MICHIGAN**

ORDAINS:

**SECTION I
AMENDMENT TO ARTICLE II “DEFINITIONS”**

Article II “DEFINITIONS”, Section 2.1 “TERMS AND WORDS DEFINED” is hereby amended by the addition of the new subsection 2.765 Large Solar Energy System, which shall read as follows:

2.76.5 Large Solar Energy System

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 with a capacity greater than one megawatt (MW).

Article II “DEFINITIONS”, Section 2.1 “TERMS AND WORDS DEFINED” is hereby amended by the addition of the new subsection 2.99.09.5 Photovoltaic Device, which shall read as follows:

2.99.09.5 Photovoltaic Device

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

Article II “DEFINITIONS”, Section 2.1 “TERMS AND WORDS DEFINED” is hereby amended by the addition of the new subsection 2.99.23 Solar Array, which shall read as follows:

2.99.23 Solar Array

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

SECTION II
AMENDMENT TO ARTICLE III “CLASSIFICATION OF DISTRICTS”

Article III “CLASSIFICATION OF DISTRICTS”, Section 3.04 Agricultural District (A), Subsection C, Uses Subject to Special Permit is hereby amended by the addition of the new subsection 8, which shall read as follows:

8. Large Solar Energy Systems

Article III “CLASSIFICATION OF DISTRICTS”, Section 3.09 Highway Service Commercial District (C-2), Subsection C, Uses Subject to Special Permit is hereby amended by the addition of the new subsection 7, which shall read as follows:

7. Large Solar Energy Systems

SECTION III
AMENDMENT TO ARTICLE V “SUPPLEMENTAL REGULATIONS”

Article V “SUPPLEMENTAL REGULATIONS”, Section 5.03 Table of Special Exception Uses is hereby amended by the addition of the new special exception use, which shall read as follows:

20. Large Solar Array A, C-2

Article V “SUPPLEMENTAL REGULATIONS”, is hereby amended by the addition of a new Section 5.23, Large Solar Array, which shall read as follows:

5.23 Large Solar Energy Systems. The following requirements shall apply to all Large Solar Energy Systems.

- A. Purpose and Intent: The purpose and intent of this Section is to establish standards for the siting, installation, operation, repair, decommissioning and removal of Large Solar Energy Systems as a Special Exception Use.
- B. Site Plan Drawing and Supporting Materials: All applications for a Large Solar Energy Systems use must be accompanied by detailed site plans, drawn to scale and dimensioned and certified by a registered engineer licensed in the State of Michigan, displaying the following information:
 - 1. All requirements for a site plan contained in Section 5.02 of the Township Zoning Ordinance.

2. All lot lines and dimensions, including a legal description of each lot or parcel comprising the Large Solar Energy System.
3. Names of owners of each lot or parcel within Sturgis Township that is proposed to be within the Large Solar Energy System.
4. Vicinity map showing the location of all surrounding land uses.
5. Location and height of all proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with a Large Solar Energy System.
6. Horizontal and vertical (elevation) to scale drawings with dimensions that show the location of the proposed Solar Array(s), buildings, structures, electrical tie lines and transmission lines, security fencing and all above ground structures and utilities on the property.
7. Location of all existing and proposed overhead and underground electrical transmission or distribution lines within the Large Solar Energy System and within 100 feet of all exterior property lines of the Large Solar Energy System.
8. Proposed setbacks from the Solar Array(s) to all existing and proposed structures within the Large Solar Energy System.
9. Land elevations for the Solar Array(s) location and the relationship to the land elevations of all existing and proposed structures within the Large Solar Energy System at a minimum of 5' contours.
10. Access driveways within and to the Large Solar Energy System, together with a detailed narrative regarding dimensions, composition, and maintenance of each proposed driveway. All access drives shall be subject to St. Joseph County Road Commission approval, and shall be planned so as to minimize the use of lands for that purpose.
11. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance or repair of the Large Solar Energy System.
12. A written description of the maintenance program to be used for the Solar Array and other components of the Large Solar Energy System, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Large Solar Energy System is decommissioned.
13. Planned lightning protection measures.

14. Additional detail(s) and information as required by the Special Exception Use requirements of the Township Zoning Ordinance, or as required by the Planning Commission.
- C. Compliance with the State Construction Code and the National Electric Safety Code: Construction of a Large Solar Energy System shall comply with the National Electric Safety Code and the State Construction Code (as shown by approval by the Township) as a condition of any Special Exception Use Permit under this section. In the event of a conflict between the State Construction Code and National Electric Safety Code (NESC), the NESC shall prevail.
- D. Certified Solar Array Components: Components of a Solar Array shall be approved by the Institute of Electrical and Electronics Engineers (“IEEE”), Solar Rating and Certification Corporation (“SRCC”), Electronic Testing Laboratories (“ETL”), or other similar certification organization if the similar certification organization is approved by the Township, which approval shall not be unreasonably withheld.
- E. Height: Maximum height of a Solar Array, other collection device, components or buildings of the Large Solar Energy System, excluding substation and electrical transmission equipment, shall not exceed fifteen (15) feet (as measured from the natural grade at the base of improvements) in height at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet in height.
- F. Lot Size: A Large Solar Energy System shall be located on one or more parcels with an aggregate area of ten (10) acres or greater.
- G. Setbacks: A minimum setback distance of fifty (50) feet from all exterior property lines of the Large Solar Energy System and existing public roads and railroad rights-of-way shall be required for all buildings and Solar Arrays, provided that a setback of one hundred (100) feet shall be required adjacent to any residential structure.
- H. Lot Coverage: A Large Solar Energy System is exempt from maximum lot coverage limitations.
- I. Screening/Security: A Large Solar Energy System shall be completely enclosed by perimeter fencing to restrict unauthorized access. The applicant will submit a fencing style type included in the site plan for approval by the Township. Electric fencing is not permitted. The perimeter of Large Solar Energy Systems shall also be screened and buffered by installed evergreen or native vegetative plantings whenever existing natural vegetation does not otherwise reasonably obscure the Large Solar Energy System from existing adjacent residential structures, subject to the following requirements:

1. The Large Solar Energy Systems shall be exempt from the other landscape requirements of this ordinance.
2. The evergreen or native vegetative buffer shall be composed of native or evergreen trees that at planting shall be a minimum of four (4) feet in height and shrubs two (2) feet in height. The evergreen trees shall be spaced no more than fifteen (15) feet apart on center (from the central trunk of one plant to the central trunk of the next plant), native trees shall be placed no more than thirty (30) feet apart on center and shrubs shall be spaced no more than seven (7) feet apart on center. All unhealthy (sixty (60) percent dead or greater) and dead material shall be replaced by the Applicant within one (1) year, or the next appropriate planting period, whichever occurs first.
3. To the extent practicable, all plant materials shall be installed between March 15 and November 15. If the Applicant requests a Final Certificate of Occupancy from the Township and the Applicant is unable to install required landscaping because of the weather, the Township may issue a temporary certificate of occupancy for no longer than 6 months duration. A temporary certificate of occupancy may only be issued if the Applicant submits a financial guarantee (an irrevocable letter of credit, surety, corporate guarantee or cash) for an amount equal to one and one-half (1.5) times the cost of any approved planting and landscape work. Upon the Applicant's completion of required landscaping work, the Township shall return the financial guarantee, less any Township costs incurred. If the Applicant does not complete the required landscape work within 6 months of the Township's issuance of the temporary certificate of occupancy, as approved by the Township, the Township has the right, upon 72 hours' notice to the Applicant, to call the guarantee and arrange completion of the work, the cost of which shall be covered by the financial guarantee.
4. Failure to install or continuously maintain the required vegetative buffer shall constitute a violation of this Ordinance. Any violation of a Special Exception Permit condition may result in the Planning Commission determining that the Special Exception Permit has been violated and may result in the revocation of the Permit.

- J. Signage: No advertising or non-project related graphics shall be on any part of the Solar Arrays or other components of the Large Solar Energy System. This exclusion does not apply to entrance gate signage or notifications containing points of contact or any and all other information that may be required by authorities having jurisdiction for electrical operations and the safety and welfare of the public.
- K. Noise: No component of any Large Solar Energy System shall emit noise exceeding sixty-five (65) dBA as measured at the exterior property boundary or the existing ROW line.
- L. Lighting: All lighting for parking lots, driveways, external illumination of buildings, or the illumination of signs shall be directed away from and be shielded from adjacent properties and shall be so arranged as to not adversely affect driver visibility on adjacent public roads.
- M. Distribution, Transmission and Interconnection: All collection lines and interconnections from the Solar Array(s) to any electrical substations shall be located and maintained underground inside the Large Solar Energy System, except in areas where technical or physical constraints make it preferable to install equipment above ground. This requirement excludes transmission equipment meant to connect the project substation to the local transmission system.
- N. Abandonment and Decommissioning: Following the operational life of the project, 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 Exception User Permit. Under this plan, all structures, concrete, piping, facilities, and other project related materials above grade and any structures up to three (3) feet below-grade shall be removed offsite for disposal. Any Solar Array or combination of Photovoltaic Devices that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the Decommissioning Plan. The ground must be restored to its original topography within three hundred sixty-five (365) days of abandonment or decommissioning.
- O. General Standards: The Planning Commission shall not approve any Large Solar Energy System Special Exception Permit unless it finds that all of the general standards for Special Exception Uses of this Ordinance are met.
- P. Approval Time Limit and Extension: Special Exception Permits and Site Plan approvals or permits under this Section shall be valid for one year. The Applicant may request a one year extension of the Special Exception Permit and/or Site Plan by applying in writing to the Planning Commission before the expiration of Special Exception Permit and/or Site Plan. The Applicant shall appear before the Planning Commission to explain why such extension

should be granted.

- Q. Conditions and Modifications: Any conditions and modifications approved by the Planning Commission shall be recorded in the Planning Commission's minutes. The Planning Commission may, in addition to other reasonable conditions, require landscaping, walls, fences and other improvements that are reasonable in relation to and consistent with the nature of the applicable or adjacent zoning districts.
- R. After approval, at least two (2) copies of the final approved Site Plan shall be signed and dated by the Chairman of the Planning Commission. One copy shall be kept on file by the Township Clerk, and one copy shall be returned to the Applicant's authorized representative.
- S. Inspection: The Township shall have the right at any reasonable time, and upon providing reasonable notice to the Applicant (a minimum of 48 hours) to inspect the premises on which any Large Solar Energy System is located. The Township may hire one or more consultants to assist with inspections. Inspections must be coordinated with, and escorted by, the Applicant's operations staff at the Large Solar Energy Facility to ensure compliance with the Occupational Safety and Health Administration (OSHA), NESC and all other applicable safety guidelines.
- T. Maintenance and Repair: Each Large Solar Energy System must be kept and maintained in good repair and condition at all times. If the Township Zoning Administrator determines that a Large Solar Energy System fails to meet the requirements of this Ordinance and the Special Exception Permit, or that it poses a safety hazard, the Zoning Administrator, or his or her designee, shall provide notice to the Applicant of the safety hazard. Applicant shall keep a maintenance log on the Solar Array(s), which shall be available for the Township's review within 48 hours of such request. Applicant shall keep all sites within the Large Solar Energy System neat, clean and free of refuse, waste or unsightly, hazardous or unsanitary conditions.
- U. Roads: Any material damages to a public road located within the Township resulting from the construction, maintenance or operation of a Large Solar Energy System shall be repaired at the Applicant's expense. In addition, the Applicant shall submit to the appropriate County agency a description of the routes to be used by construction and delivery vehicles; any road improvements that will be necessary to accommodate construction vehicles, equipment or other deliveries. The Applicant shall abide by all County requirements regarding the use and/or repair of County roads and also specifically agrees to be bound by any Township special assessment regarding road improvements.

- V. Continuing Security: If any Large Solar Energy System is approved for construction under this section, 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 Land 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 Exception Use Permit.
- W. Other Requirements: Each Large Solar Energy System shall also comply with all applicable federal, state and county requirements, in addition to other applicable Township Ordinances. The applicant should contact the Michigan Department of Agriculture and Rural Development (MDARD) to verify the impact of a large solar energy system on a property's enrollment and/or participation in PA 116 (Farmland Preservation).

SECTION IV **SEVERABILITY**

This Ordinance and the various parts, sections, subsections, phrases and clauses thereof are hereby declared to be severable. If any part, sentence, paragraph, section, subsection, phrase or clause is adjudged invalid, the same shall not affect the validity of the Ordinance as a whole or any part thereof, other than the part so declared to be invalid.

SECTION V **EFFECTIVE DATE/REPEAL**

This Ordinance shall take effect eight (8) days following publication after adoption. All ordinances or parts of ordinances in conflict with this Ordinance, are hereby repealed.

Michael Bobalik, Clerk
Township of Sturgis
26015 W. US 12
Sturgis, MI 49091
269-651-3676
www.sturgistownship.org