

**TOWNSHIP OF FAWN RIVER  
ST. JOSEPH COUNTY MICHIGAN**

**ORDINANCE NO. 49**

**ADOPTED: 3/13/2023**

**EFFECTIVE: 3/31/2023**

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

**THE TOWNSHIP OF FAWN RIVER  
ST. JOSEPH COUNTY, MICHIGAN**

**ORDAINS:**

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

Article III “DEFINITIONS”, Section 3.1 “DEFINITIONS” of the Township Zoning Ordinance is hereby amended by the addition of a new subsection (80) Solar Energy to read as follows:

80. Solar Energy Systems: A system of components that collects or stores sunlight for the purpose of generating any other form of usable energy, whether or not the device is able to store the electric energy produced for later use.

- a. 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 electricity for later use.
- b. Solar panel: a flat panel that uses arrays of photovoltaic cells to convert sunlight into electricity.
- c. Solar Array: any number of solar panels connected together to provide a single output of electric energy or other energy.
- d. Building Integrated Photovoltaics: A solar energy system that is integrated into the structure of a building, such as solar roof tiles.
- e. Small Solar Energy System: Solar energy systems used primarily for private residential or commercial use, which shall not be utilized for any commercial resale of any energy, except for the sale of surplus energy back to the electrical grid.

- f. 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). A large solar energy system does not include small solar energy systems installed at individual residential or commercial locations (ie.,roof or ground mounted panels).
- g. Roof or Building Mounted Solar Energy System: a solar energy system attached to or mounted on any roof or exterior wall of any principal or accessory building, but excluding BIPVs.
- h. Ground Mounted Solar Energy System: a solar energy system that is not attached to or mounted to any roof or exterior wall of any principal or accessory building.

**SECTION II**  
**AMENDMENT TO ARTICLE IV “GENERAL PROVISIONS ”**

Article IV “GENERAL PROVISIONS”, is hereby amended by the addition of a new Section numbered 4.34, to read as follows:

“4.34 Solar Energy Systems:

- 1. General Requirements: All solar energy systems are subject to the following general requirements:
  - a. All solar energy systems must conform to the provisions of this Ordinance and all county, state, federal or other applicable regulations and requirements.
  - b. Solar energy systems shall be located so that concentrated solar glare shall not be directed toward or onto any nearby properties or roads at any time.
  - c. If a solar energy system is abandoned or not operated for a period of one year, the solar energy system shall be determined to be abandoned and shall be removed within six months from date of notice of abandonment by Township Zoning Administrator to the property owner and/or operator of the solar energy system.
  - d. A building permit shall be required for installation of any and/or all solar energy systems.
- 2. Building Integrated Photovoltaics will be permitted in all zoning districts provided that the BIPVs meet all County, State and federal regulations and requirements, including the Michigan Building Code. A building permit shall be required for the installation of any BIPVs.
- 3. Small Solar Energy Systems shall be considered an accessory use in all zoning districts provided that the following requirements are met:
  - a. No part of the small solar energy system erected on a roof shall extend

beyond the peak of the roof. If the small solar energy system is mounted on a building in an area other than the roof, no part of the small solar energy system shall extend beyond the wall on which it is mounted.

- b. No part of a small solar energy system mounted on a roof shall be installed closer than three feet from the edges of the roof, the peak, or eave or valley in order to maintain accessibility.
- c. No part of a small solar energy system mounted on a roof shall extend more than two feet above the roof surface.
- d. Before installation of a small ground mounted solar energy system, a property owner must submit a site plan to the Township Zoning Administrator.
- e. A small ground mounted solar energy system shall not exceed the maximum building height for an accessory building, but in no case shall the height of any small ground mounted solar energy system exceed fifteen feet above the ground when oriented at maximum tilt.
- f. A small ground mounted solar energy system shall be located in the rear yard and shall meet rear yard setback requirements of the applicable zoning district.
- g. All power transmission lines, wires or conduits from a small ground mounted solar energy system to any building or structure shall be located underground. If batteries are used as part of the small ground mounted solar energy system, they must be secured in a container or enclosure.
- h. There shall be landscape screening around any small ground mounted solar energy system to obscure, to the greatest extent possible, the small solar energy system from any adjacent residentially zoned or residentially developed properties.
- i. Not more than 25% of total lot area may be covered by a small ground mounted solar energy system.

4. Large Solar Energy Systems.

- a. Large Solar Energy Systems shall only be allowed as a special exception use in the AG, Agricultural Zoning District, subject to the provisions and requirements of Article XVIII.

**SECTION III**  
**AMENDMENT TO ARTICLE XVIII “SPECIAL EXCEPTION USES”**

Article XVIII “SPECIAL EXCEPTION USES”, is hereby amended by the addition of a new subsection designated 18.7 (23) to read as follows:

“23. Large Solar Energy System

- A. 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 19.4 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 the 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-Scale 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.
- B. 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.
- C. 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.
- D. 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 in height (as measured from the natural grade at the base of improvements) at any time or location on the property. Substation and electrical transmission equipment shall not exceed one hundred (100) feet in height.
- E. 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.
- F. 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.
- G. Lot Coverage: A Large Solar Energy System is exempt from maximum lot coverage limitations.
- H. 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.

- I. 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.
- J. 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.
- K. 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.
- L. 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.
- M. 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.
- N. 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.
- O. 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.

- P. 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 written 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 written 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.
  
- Q. 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.
  
- R. 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 plus administrative costs 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.

- S. 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.”

**SECTION IV**  
**AMENDMENT TO ARTICLE IX, AG “AGRICULTURAL DISTRICT”**

Article IX “AGRICULTURAL DISTRICT”, is hereby amended by the addition of two new Subsections designated 9.2(21) and 9.3 (26), which shall read as follows:

“9.2 PERMITTED USES

21. Small Solar Energy System, as an accessory use

9.3 SPECIAL EXCEPTION USES

26. Large Solar Energy Systems”

All other provisions of Sections 9.2 and 9.3 remain unchanged.

**SECTION V**  
**AMENDMENT TO ARTICLE X, R-1“SINGLE FAMILY RESIDENTIAL DISTRICT”**

Article X “R-1 SINGLE FAMILY RESIDENTIAL DISTRICT”, is hereby amended by the addition of a new Subsection designated 10.2 (11), which shall read as follows:

“10.2 PERMITTED USES

11. Small Solar Energy System, as accessory use.”

All other provisions of Section 10.2 remain unchanged.

**SECTION VI**  
**AMENDMENT TO ARTICLE XI, R-2 “MULTIPLE FAMILY RESIDENTIAL DISTRICT”**

Article XI “R-2 MULTIPLE FAMILY RESIDENTIAL DISTRICT”, is hereby amended by the addition of a new Subsection designated 11.2 (17), to read as follows:

“11.2 PERMITTED USES

“17. Small Solar Energy System, as an accessory use.”

All other provisions of Section 11.2 remain unchanged.

**SECTION VII**  
**AMENDMENT TO ARTICLE XII, R-3 “MOBILE HOME PARK RESIDENTIAL DISTRICT”**

Article XII “R-3 MOBILE HOME PARK RESIDENTIAL DISTRICT”, is hereby amended by the addition of a new Subsection designated 12.2 (9), to read as follows:

“12.2 PERMITTED USES

9. Small Solar Energy System, as an accessory use.”

All other provisions of Section 12.2 remain unchanged.

**SECTION VIII**  
**AMENDMENT TO ARTICLE XIII, R-L “LAKE RESIDENTIAL DISTRICT”**

Article XIII “R-L LAKE RESIDENTIAL DISTRICT”, is hereby amended by the addition of a new Subsection designated 13.2 (9), to read as follows:

“13.2 PERMITTED USES

9. Small Solar Energy System, as an accessory use.”

All other provisions of Section 13.2 remain unchanged.

**SECTION IX**  
**AMENDMENT TO ARTICLE XIV, C-L “LOCAL COMMERCIAL DISTRICT”**

Article XIV “C-L LOCAL COMMERCIAL DISTRICT”, is hereby amended by the addition of a new Subsection designated 14.2 (29), to read as follows:

“14.2 PERMITTED USES

29. Small Solar Energy System, as an accessory use.”

All other provisions of Section 14.2 remain unchanged

**SECTION X**  
**AMENDMENT TO ARTICLE XV, M-1 “MANUFACTURING DISTRICT”**

Article X “M-1 MANUFACTURING DISTRICT”, is hereby amended by the addition of a new Subsection designated 15.2 (10), to read as follows:

“15.2 PERMITTED USES

10. Small Solar Energy System, as an accessory use.”

All other provisions of Section 15.2 remain unchanged

**SECTION XI**  
**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 XII**  
**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.

Ammara Kanjanayothee, Clerk  
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