

**TOWNSHIP OF SHERIDAN  
CLARE COUNTY, MICHIGAN**

**ORDINANCE TO PROVIDE FOR  
SOLAR ENERGY SYSTEMS**

**ORDINANCE NO. 2-2023**

*An Ordinance to provide for the land development, installation, and construction regulations for photovoltaic facilities subject to reasonable conditions that will protect the public health, safety, and welfare. These regulations establish minimum requirements and standards for the placement, construction, modification, and decommissioning of photovoltaic facilities.*

**THE TOWNSHIP OF SHERIDAN ORDAINS:**

**Section 1. Intent and Purpose.**

The Township of Sheridan (the "Township") adopts the following provisions for the health, safety, and welfare of Township residents. This Ordinance intends to protect Township areas from any potentially adverse effects of commercial (large-scale) solar energy systems and related structures or devices so that the public health, safety, and welfare will not be jeopardized; establishes standards and procedures by which the siting, design, engineering, installation, operation, and maintenance of private and commercial photovoltaic facilities shall be governed; and provides for the removal of abandoned or noncompliant solar energy systems with related structures and devices.

**Section 2. Definitions.**

**Solar Energy Systems Definitions as Used in This Ordinance:**

*SOLAR ENERGY SYSTEM (SES):* A photovoltaic system or solar thermal system for generating and /or storing electricity or heat, including all above and below ground equipment or components required for the system to operate properly and to be secured to a roof surface or the ground. This includes any necessary operations and maintenance buildings but does not include any temporary construction offices, substation(s) or other transmission facilities between the SES and the point of interconnection to the electric grid. Also referred to as a Commercial Solar Energy System (CSES) or Large-Scale Solar Energy System.

*SMALL-SCALE SOLAR ENERGY SYSTEM (SSES):* (also called non-commercial, private, personal or accessory, or residential) A Solar Energy System in which the principal design, purpose, and use is to provide energy exclusively for on-site uses and not for sale to a utility on the grid except for the sale of surplus electric energy produced. Also referred to as non-commercial, personal, private, accessory, or residential.

*ABANDONMENT:* To give up, discontinue, withdraw from. Any solar energy system that ceases to produce energy on a continuous basis for twelve (12) months shall be considered abandoned. This includes a Solar Energy System that has never been operational if construction has been discontinued for a period of twelve (12) consecutive months.

*AGRICULTURE DRAIN TILE SYSTEM:* A type of drainage system used in farming operations

that removes excess water from soil below its surface using underground drainage tiles.

*ANSI*: American National Standards Institute.

*BIVP*: Building-integrated photovoltaic panel, attached or integrated.

*COMMERCIAL SOLAR ENERGY SYSTEM (CSES)*: (also called large or utility-scale) A Solar Energy System in which the principal design, purpose, or use is to provide energy to off-site uses or the wholesale or retail sale of generated electricity to any person or entity.

*COMPLAINT VENDOR*: 3<sup>rd</sup> party website/web manager of complaint process.

*CONCENTRATING SOLAR ENERGY SYSTEMS*: Solar Energy Systems that use some form of reflective mirror, heliostats, dish collectors or other devices to concentrate solar energy on a central receiver.

*dB(A)*: The sound pressure level in decibels referred to in the "A" weighted scale.

*dB(C)*: The sound pressure level in decibels referred to in the "C" weighted scale.

*DECIBEL*: A unit of measure used to express the magnitude of sound pressure and sound intensity.

*DECOMMISSION*: To remove or take out of active service.

*DECOMMISSIONING PLAN*: A document that details the planned shut down and removal of a SES from operation or usage.

*DEVELOPMENT PLAN*: A common term for a development design and description for a specific project including, but not limited to, parcel boundaries, topography, and existing structures, proposed utilities, infrastructure, structures, and other construction or improvements, distances from boundaries and or between structures including set-backs from certain markers, e.g., road rights-of-way or existing structures, that is used for permitting and construction purposes of a proposed project.

*FENCE*: A continuous barrier extending from the surface of the ground to a uniform height of not less than seven (7) feet from the ground at any given point, constructed of steel, or other material of similar strength.

*FERC*: The Federal Energy Regulatory Commission.

*GLARE*: Visual conditions in which there is excessive contrast or an inappropriate distribution of light sources that disturbs the observer or limits the ability to distinguish details and objects.

*GROUND-MOUNTED SES*: A Private or Commercial Solar Energy System that is not attached to or mounted to any roof or exterior wall of a principal or accessory building.

*GRID*: The infrastructure of power lines, transformers and substations that delivers electric power to users. The utility grid is mainly owned and managed by private electric utility companies.

*L<sub>Amax</sub>*: The maximum dBA sound level per a noise event. All noise measurements shall use L<sub>Amax</sub> dBA methods.

*NON-PARTICIPATING PARCEL*: A parcel of land within the Township or an adjacent township that is not subject to a utility scale SES lease or easement or other contractual agreement at the time an application is submitted for a permit for the purpose of developing and constructing a Large-scale or Commercial Solar Energy System.

*PA 116*: The Michigan Farmland and Open Space Preservation Act, is a law that works to preserve farmland by offering incentives to farmers and other land owners who participate.

*PARTICIPATING PARCEL*: A parcel of land within the Township that is subject to lease or easement agreement or other contractual agreement at the time the application is submitted for a permit for the purpose of developing and constructing a Large-scale or Commercial Solar Energy System.

*PHOTOVOLTAIC (PV)*: A method of generating electrical power converting solar radiation (sunlight) into electrical current.

*PUBLIC ROAD*: Any road or highway which is now or hereafter designated and maintained by the Clare County Road Commission as part of the County Road System, whether primary or secondary, and to include any road(s) under the jurisdiction of Township or the State of Michigan.

*REPOWERING*: Reconfiguring, renovating, or replacing an SES to maintain or increase the power rating of the SES within the existing project footprint.

*RESIDENCE*: A building used as a dwelling by a family or group of persons in a household.

*ROOFTOP OR BUILDING MOUNTED SOLAR ENERGY SYSTEMS*: A Personal or Accessory Scale Energy System attached to or mounted on any roof or exterior wall of a principal or accessory building.

*SET-BACK*: Is a commonly used term to denote a minimum distance required between certain structures or elements of structures from rights-of-way or property boundaries.

*SOLAR ARRAY*: A photovoltaic panel, solar thermal collector, or collection of panels or collectors in a solar energy system that collects solar radiation.

*SOLAR CANOPIES*: Solar energy systems that are elevated above the ground such that the land beneath the panel can be used for a secondary purpose. For example, those systems installed above parking lots (also referred to as solar car ports) or in yards to provide shade.

*SOLAR ENERGY*: Radiant energy emitted by the sun.

*SOLAR GLARE*: The effect produced by light reflecting from a solar panel with an intensity sufficient to cause annoyance, discomfort, or loss of acceptable visual performance.

*SOLAR GLARE HAZARD ANALYSIS TOOL (SGHAT):* A tool developed by the Sandia National Laboratories, used to measure the potential unwanted visual impacts to pilots, workers, motorists, and others near a solar energy system.

*STRAY VOLTAGE:* Stray voltage refers to voltage differences that can exist between two surfaces. These surfaces may be accessible to animals (stanchions, waterers, floors, etc.). When an animal touches both surfaces simultaneously, a small electric current may flow through its body and if the current is high enough, it can be felt by the animal and may cause behavioral changes.

*USDA:* The United States Department of Agriculture

*WILDLIFE-FRIENDLY FENCING:* A fencing system with openings that allow wildlife to traverse through a fenced area.

### **Section 3. General Provisions.**

#### **A. LARGE-SCALE SOLAR ENERGY SYSTEMS**

With advances in the technology of solar energy development in general, specific locations within the Township may support the implementation of Large-Scale Solar Energy Systems within the Township. This Ordinance is intended to preserve and protect the Township's important environmental and ecological assets, open spaces, viewsapes and aesthetics, wetlands, and other valuable areas. The general welfare, health, and safety of the citizens of the Township will be promoted by the enactment of this ordinance. This ordinance shall not abridge the safety, health or environmental requirements of other applicable codes, standards, or ordinances. The Township shall revoke the permit for, and require the removal of, any SES that does not comply with this Ordinance.

#### **B. COMMERCIAL SOLAR ENERGY SYSTEMS**

All commercial, large-scale solar energy facilities shall be designed and built to provide electricity exclusively to the electric utility's power grid and are not accessory to any other use. The commercial Solar Energy System may occupy the same property with another use.

##### **1. Application Requirements:**

a. Written authorization from the local utility company for connection to the utility grid will be provided to the Township acknowledging and approving the connection. All wiring shall comply with applicable Michigan construction and electrical codes. The applicant shall submit certificates of design compliance obtained by the equipment manufacturer from a certifying organization.

b. *Applicant Identification:* The application shall include the Applicant(s) name and Owner(s) name if different, and their address(es) in full, as well as a statement that the applicant is the owner involved or is acting on the owner's behalf. Each application for a Commercial Solar Energy System shall also indicate the date the application is submitted to Sheridan Township.

c. *Application Fees and Escrows:* The applicant shall remit an application fee and an escrow deposit. The required amounts shall be as specified in the fee schedule adopted

by the Township Board in addition to any other escrow accounts required in this ordinance. All review costs shall be borne by the applicant and deducted from the escrow.

- d. An escrow account shall be set up when the applicant applies for a Permit for a Solar Energy System installation. The monetary amount filed by the applicant with the Township shall be in an amount estimated by the Township Board to cover all costs and expenses associated with the application review and approval process, which costs may include, but are not limited to, fees of the township attorney, township planner, and township engineer, or those contracted by the Township as well as any reports or studies which the Township anticipates will be required during the review process for the particular application. At any point during the review process, the Township may require that the applicant place additional monies into escrow with the Township should the existing escrow amount filed by the applicant be insufficient in the determination of the Township Board. If additional funds are required by the Township to be placed in escrow and the applicant refuses to do so, the review and approval process shall cease until and unless the applicant makes the escrow deposit as required in this Ordinance. Any escrow amounts which are in excess of actual costs shall be returned to the applicant. An itemized billing of all expenses shall be provided to the applicant.
- e. *Project Description and Rationale:* Identify the type, size, rated power output, performance, safety, and noise characteristics of all elements of the system, including the name and address of the manufacturer(s), and models. Identify project installation time frame, project life, development phases, likely markets for the generated energy and possible future expansions. Supporting documentation for addressing the review criteria, standards, and findings supporting the applications are to be provided. The Township Board may require any information reasonably necessary to determine compliance with this ordinance.
- f. *Parcel Identification:* All parcels that will be included in the Commercial or Large-Scale Solar Energy System shall be included in the application. This includes parcels that will be traversed during any construction, on which transmission or collection lines cross, for driveways and access roads, or for which any form of easement agreement is granted to the applicant. An address or the nearest crossroads if no address is available, a parcel identification number, and a legal description for each parcel shall be included. Any subsequent addition to the list of parcels after submission of the application will require a new application submission.
- g. *Property Owner Permission, Easement, Lease, or other Contractual Evidence:* Evidence of an agreement between the property owner and the proposed facility's owner or operator confirming the owner or operator has permission of the property owner to apply for the necessary permits for construction and operation of the SES. A copy of that portion of the applicant's lease with the landowner(s) for the listed parcels granting easements and authority for use shall be provided. This shall be in the form of a copy of documents recorded with the Clare County Register of Deeds. Copies of recorded documents must also be provided for any waiver agreements as authorized by this Ordinance entered into by non-participating landowners.

- h. *Expected Employment*: Expected construction jobs and permanent jobs associated with the development.
- i. *Visual Impacts*: Review and demonstrate the visual impact of the development using photos or renditions of the project or similar projects with consideration given to tree plantings and setback requirements.
- j. *Wildlife*: Review potential impact on wildlife on the site, including compliance with Endangered Species Protection laws and Inland Lakes and Streams regulations.
- k. *Environmental analysis*: Identify impact analysis on the water quality and water supply in the area, and dust from project activities. The applicant shall provide evidence of compliance with applicable State of Michigan statutes for Water Resource Protection, Natural Resources, Environmental Protection Acts, and Soil Erosion and Sedimentation Control.
- l. *Soil Erosion and Sedimentation Control Plan*: An approved and permitted soil erosion plan must be submitted. The plan must be approved by the Clare County designated Soil Erosion Control Officer.
- m. *Waste*: Identify and quantify solid waste or hazardous waste generated by the project. This includes plans for the spill prevention, clean-up, and disposal of fuels, oils, and hazardous wastes.
- n. *Water Usage and Storm Water Discharge Permit*: The applicant shall detail the methodology planned for cleaning the solar panels, frequency, and listing of any and all detergents, surfactants, chemicals, pesticides and herbicides, estimate of quantity of water or chemical solutions used for each cleaning, and sources of water used to facilitate panel restoration and maintenance. Proof of a stormwater discharge permit from the State of Michigan shall be provided prior to any construction including site preparation.
- o. *Solar glare*: The applicant shall provide a review of reflective angles to ensure unreasonable glare will not affect traffic or adjacent properties.
- p. *Airport Review*: Because Sheridan Township falls within the area covered by the Clare Municipal Airport Runway Protection Zone, any commercial or large-scale Solar Energy facility must be reviewed using the current Solar Glare Hazard Analysis Tool (SGHAT) available through Sandia National Laboratories or a commercially available equivalent. The SGHAT will be used to ensure that the airport and those that use them will not be affected by unwanted visual or ocular impacts. The process is designed to save costs and increase public safety.
  - 1) The analysis shall determine if there are any potential adverse effects on any registered airfield within ten miles of the project. Effects noted should include any possible decreased safety and utility.

- 2) In addition, all proposed solar facilities must obtain a Determination of No Hazard (DNH) from the Federal Aviation Administration (FAA). A DNH does not eliminate the need for the SGHAT study nor does it in any way eliminate the standard for glare on roadways or non-participating parcels.
  - 3) The DNH must be obtained prior to breaking ground on any portion of the Commercial Solar Energy System.
  - 4) No Commercial or Large-Scale Solar Energy System that impacts safety or utility of any registered airfield shall be permitted.
  - 5) A waiver may be obtained from the non-participating property owners in the form of a recorded easement and provided to Township. No waiver shall be allowed for any parcel if the SGHAT shows unwanted effect on the Clare Municipal Airport or other registered airfields that would originate from the waived parcel. Any waiver must in the form of an easement agreement recorded with the Clare County Register of Deeds.
- q. *Transportation Plan:* Provide access plan during construction and operation phases. Plans for dust control on access roads must be provided along with a schedule for maintenance and weed control. The plan shall show proposed project service road ingress and egress access onto primary and secondary routes, layout of the array service road system.
  - r. *Public safety:* Identify emergency and normal shutdown procedures. Identify potential hazards to adjacent properties, public roadways, and to the community in general that may be created. Applicant shall provide an unredacted safety manual for all components of the project as well as material safety data sheets that include the type and quantity of all materials used in the operation of all equipment. The applicant shall provide training and a safety manual for distribution to first responders to be kept with the Clare County Emergency Manager and the Township Board. This safety manual should include possible emergency events and actions to be taken, the fire suppression process and procedures, as well as training for emergency personnel. Plans shall be kept on-site for emergency responders' access.
  - s. *Sound limitations and review:* Identify noise levels dBA LMax at the property line of the project boundary when completed.
  - t. *Telecommunications interference:* Identify electromagnetic fields and communications interference generated by the project.
  - u. *Utility company involvement:* A copy of the application and approval of the power of purchase agreement with the utility company that will be purchasing electricity from the proposed site shall be provided to the Township.
  - v. *Analysis and Studies:* The results and data from all studies and evaluations required in the Standards Section of the Solar Energy portion of this Zoning Ordinance shall be provided. This includes certifications and attestation showing how the Commercial or

Large-Scale Solar Energy System will meet or exceed all standards and restrictions required by this ordinance.

- w. *Insurance*: Proof of the applicant's public liability insurance shall be provided at the time of application. If the application is approved, proof of insurance shall be provided to the Township annually thereafter. The policy must provide for bodily injury and property damage and must name Sheridan Township as an additional insured. The applicant shall insure for liability for the Commercial or large-scale solar Energy System until removed for at least \$25,000,000 per occurrence to protect the applicant, Township, and property owner.
  
- x. *Decommissioning*: A decommissioning plan shall be submitted indicating the anticipated manner in which the project shall be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g., access drive, fencing), or restored for viable reuse of the property. The decommissioning plan shall include, at minimum, the following topics:
  - 1) The anticipated life of the project.
  
  - 2) Applicant provided decommissioning cost estimate study excluding salvage value in addition to independent studies by demolition companies that the Township selects.
  
  - 3) Provide proof of the financial resources used to accomplish decommissioning upon abandonment or non-operation. The applicant shall include a proof of the financial security active before the permit is approved along with the escrow agent with which the resources will be deposited. Security shall be in the form of a cash deposit or bond. The duration of the security shall be termed to the removal of the solar energy equipment as stated in the ordinance or land leases (easements), whichever is greater. Security shall be pre-paid approved by the Township Board and Township attorney.
  
  - 4) A detailed plan on how the Commercial or Large-Scale Solar Energy System will be decommissioned, including a detailed policy and process book for the repair, replacement, and removal of malfunctioning, defective, worn, or non-compliant solar energy components.
  
  - 5) Any large-scale solar energy system that is not operated for a continuous period of twelve (12) months shall be considered abandoned and shall be removed under the decommissioning plan.
  
  - 6) An attestation that the applicant will indemnify and hold the Township harmless from any costs or liability arising from the approval, installation, construction, maintenance, use, repair, or removal of the Solar Energy System, which is subject to the Township's review and approval.
  
  - 7) Any additional information or documentation requested by the Township Board, or other Township representative.



- 8) An application and plan for *repowering* in accordance with the standards of this ordinance may be submitted to continue the use of the SES site.
- y. Development Plan: Plans, drawn to appropriate scale, shall identify specifically, at minimum, all items in the following list:
- 1) A description of the proposed technology from the system manufacturer.
  - 2) All lots and parcels in the Commercial or Large-Scale Solar Energy System and locations and sizes of associated buildings, accessory structures, and overall project area boundaries.
  - 3) Location and details of planned utility equipment, transmission lines, solar panels, drainage ways.
  - 4) The location, approximate height, and dimensions of all existing structures, existing parcel drainage tile layouts, landscaping, and fencing on the parcels planned for Solar Energy System installation including other parcels within (1/4) one quarter of a mile radius.
  - 5) Topographical grades and conditions of the planned Solar Energy System parcel(s) or lots at time of application and grading plans for any proposed changes.
  - 6) Documentation of existing vegetation, regulated wetlands, regulated floodplains, regulated, and endangered species, and regulated lakes, streams, or ponds.
  - 7) Required set-backs, location of designated panels and footprint area(s), location of property lines, buildings, and road or other rights-of-way.
  - 8) Access routes to lots and parcels that are part of the solar facility.
  - 9) Proposed road and driveway improvements.
  - 10) All existing and proposed underground utilities not exclusive to the Commercial or Large-Scale Solar Energy System such as gas lines, phone lines, cable, etc.
  - 11) Location of any lots or parcels (participating or non-participating) within two thousand (2000) feet of the Solar Energy System, location of wetlands, wooded areas, public conservation areas, state game areas, etc., within five (5) miles of the Commercial or Large-Scale Solar Energy System.
  - 12) The location, grades, and dimensions of all temporary and permanent on-site access roads from the nearest county or state-maintained road.

- 13) Ingress and egress from the site as proposed during construction and thereafter indicating road surface, width, and length of access route.
- 14) All new infrastructure above ground and underground that is part of the Commercial or Large-Scale Solar Energy System or that connects the Commercial or Large-Scale Solar Energy System to the public utility grid.
- 15) Proposed signage and location(s).
- 16) Location and orientation of any lighting and batteries used in the project.
- 17) Location of any assets including trees to be removed.
- 18) Methods for dust and erosion control.

2. Standards and Requirements.

- a. A permit for a Commercial Solar Energy System is transferable to a new owner. The new owner must register its name and business address with the Township and must comply with this Ordinance and all approvals and conditions issued by the Township.
- b. Commercial or Large-Scale Solar energy facilities may be permitted on properties enrolled in the PA 116 Farmland and Open Space Preservations Programs, but the applicant is required to file a change request in land use status with the State of Michigan and receive amended approval for locating a Solar Energy facility on the property. Documentation must be provided prior to beginning any pre-construction or construction on any portion of the project.
- c. Utility-scale and commercial solar energy environmental considerations include land disturbance/land use impacts; potential impacts to specially designated areas; impacts to soil, water and air resources; impacts to vegetation, wildlife, wildlife habitat, and threatened or endangered species; visual, cultural, paleontological, socioeconomic, and potential impacts from hazardous materials.
- d. Shall comply with the Clare Municipal Airport Regulations and shall not interfere or change any existing airspace or aircraft rules, regulations, or procedures.
- e. *Development Plan*: Except where noted in this Ordinance, it shall be unlawful to construct, erect, install, use or locate a commercial solar energy system unless a permit, based at least partly upon an approved development plan, has been approved pursuant to this Ordinance.
- f. *Minimum lot size and coverage*: Large-scale photovoltaic solar energy systems shall not be constructed on parcels less than forty (40) acres in size. The minimum required may consist of multiple contiguous parcels.
- g. *Height Restrictions*: All photovoltaic panels located in a solar energy system and any mounts, buildings, accessory structures, and related equipment shall be restricted to a

maximum installed height of 14 feet when oriented at maximum tilt. Lightning rods may exceed 14 feet in height, but they must be limited to the height and number necessary to protect the SES from lightning.

- h. **Set-backs:** All photovoltaic solar panels and support structures associated with a SES (excluding perimeter security fencing) shall be a minimum of one hundred (100) feet from a side or rear property line and a minimum of one hundred (100) feet from any road, highway right-of-way, and three hundred (300) feet minimum from any adjacent residence or business at the time of the permit application unless a waiver allowing such is filed with the Clare County Register of Deeds.
- i. Solar arrays and other structures shall not be located within fifty feet (50) of a drain easement.
- j. When a commercial solar energy system comprises multiple lots of more than one owner, the internal set-backs shall not apply on the joined lot lines.
- k. *Fencing:* A Ground-mounted SES shall be secured with a fence from adjacent properties and roadways inside the buffer plantings to restrict unauthorized access and shall have at least one access gate. A minimum height of seven (7) feet is required around the perimeter of the site for safety, security, and protection from scavengers. Fencing must be maintained at the expense of the owner of the solar facility and meet the requirements of the industry standards in effect at time of installation. Fencing shall be designed to prevent unauthorized access to electrical components. Access gates shall be locked at all times when authorized SES personnel are not present.
- l. *Safety/Access:* A security fence shall be locked. Lock boxes and keys or electronic devices such as keypads with passcodes shall be provided at locked entrances for emergency personnel (e.g., police, fire, ambulance) access. Electric fencing is not permitted. A safety plan shall be in place and updated regularly in coordination with the local fire department.
- m. *Sound Pressure Level:* No commercial or large photovoltaic solar facilities shall emit any form of audible sound energy, frequency, or spectrum exceeding forty (40) dBA LMax as measured at the property line of the project boundary. All sound measurements are instantaneous and shall not be averaged. A sound barrier consisting of an evergreen tree berm shall be constructed to attenuate noise levels surrounding all electrical inverters. It shall be no more than twenty (20) feet from the equipment, and no less than the height of the inverters. Sound analysis or modeling performed by a sound engineer selected by the Township must confirm that the Commercial Solar Energy System will not exceed the maximum permitted sound pressure levels. Modeling and analysis can be based on the solar equipment manufacturer data. However, measured data from existing and similar Solar Energy System facilities shall be submitted with the modeling report.
- n. *Site Clearing:* Clearing of natural vegetation shall be limited to what is necessary for the construction and maintenance of the installation. No land assets, such as but not limited to, topsoil, sand, gravel, etc. may be removed from the premises without the written approval of the landowner and must be done in accordance with Township

Ordinances. A copy of landowner approval for removal of any assets as described must be on file with the Township prior to removal.

- o. A ground cover suitable for growth in the shade must be planted within (4) four months of project construction. The ground cover planted must be one that the USDA has determined will grow in this region under the proposed project conditions.
- p. *Screening and Landscaping:* The perimeter of Commercial Solar Energy Systems shall be screened and buffered by installed vegetative plantings whenever existing natural vegetation does not obscure the view of the SES from a public street or adjacent residential structures, subject to the following requirements:

- 1) When a Utility-Scale Solar Energy System is adjacent to a residential lot, front, side and rear yard screening will be required.
- 2) The landscape screening shall use materials, colors, textures, and landscaping that will blend into the natural setting and existing environment without adverse visual effects on the natural landscape or the character of the surrounding area.
- 3) All Commercial or Utility-Scale Solar Energy Systems shall have a minimum landscape buffer of (25') twenty-five feet on all four sides. The buffer shall consist of deciduous and evergreen trees and bushes.

The plantings shall be comprised of 2-3 rows:

- (a) Trees shall be 10' tall for 14' tall solar panels
  - (b) Trees shall be 8' tall for 12' tall solar panels
  - (c) Each row requires trees to be on 14' centers
  - (d) Each row shall be 12' apart
  - (e) The Township Board may require additional plantings or reduced plantings depending on boundary parcel conditions in keeping with the intent of this ordinance.
- 4) A SES shall include the installation of perennial ground cover vegetation maintained for the duration of operation until the site is decommissioned. The applicant shall include a ground cover vegetation establishment and management plan as part of the site plan.
  - 5) All unhealthy and dead material shall be replaced by the applicant within (6) months, or within the next appropriate planting period.
  - 6) Failure to comply with the required vegetative requirements shall constitute a violation of this Ordinance and Permit(s) shall be revoked unless unavoidable issues, as determined by the Board, are present.
- q. *Signage:* No advertising or non-project related graphics shall be on any part of the solar arrays or other components of the large photovoltaic SES. 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.

- 1) An information sign shall be posted and maintained at the entrances(s) that lists the name and phone number of the operator and emergency contact information.
  - 2) Signs warning of the high voltage associated with the solar energy facility shall be posted at every entrance and at pad-mounted transformers and substation bases.
- r. *Electrical Cables:* All electrical interconnection and distribution lines shall comply with all applicable codes and standard commercial large-scale utility requirements. Use of above ground transmission lines shall be prohibited within the site, with underground lines placed at a depth of six (6) feet or deeper.
- s. *Battery Usage and Storage:* No commercial grid storage batteries or capacitor banks storing or returning supplemental power to the grid shall be permitted. Use of batteries in commercial applications will only be permitted as emergency backup for safety lighting and operational equipment.
- t. *Lighting Provisions:* Lighting of the Commercial or Large-Scale Solar Energy System shall be limited to the minimum necessary for safe operation, supplied with down lighting, and in no case shall any illumination from such lighting extend beyond the perimeter of the Commercial Solar Energy System. The Township may require use of a photometric study to make this determination.
- u. *Stray Voltage Assessments:* No stray voltage originating from Commercial or Large-Scale Solar Energy System may be detected on any participating or non-participating parcels. A preconstruction stray voltage test shall be conducted on all Michigan Department of Agriculture & Rural Development (MDARD) registered livestock facilities located within a one-mile radius of the Solar facility parcels. The tests shall be performed by an investigator approved by the Township. A report of the tests shall be provided to the owners of all property included in the study area. The applicant shall seek written permission from the property owners prior to conducting testing on such owners' property. Applicant shall not be required to perform testing on property where the owners have refused to grant permission to conduct the testing. The owner of any participating parcel(s) included in the list of project parcels, may not refuse the stray voltage testing if they have a MDARD registered livestock facility on the parcel or a portion of the parcel.
- v. *Drain Tile System:* Prior to the start of construction, any existing drain tile must be inspected by robotic camera and the imagery submitted to the township for baseline documentation on tile condition. Any damage shall be repaired, and a report submitted to the landowner and township. While the facility is in operation, the drain tiles are to be re-inspected every 3 years for any damage and repaired within 60 days of discovery. The Township reserves the right to have the Building Inspector or other agent present at the time of repair. Solar array support structures and/or foundations shall be constructed to preserve any drainage field tile or system.

- w. Local, State, and Federal Permits: Commercial or Large-Scale Solar Energy Systems shall be required to obtain all necessary permits from the U.S. Government, State of Michigan, Clare County, and Sheridan Township, and comply with standards of the State of Michigan adopted codes. In addition, if the lot on which the project is proposed is to be leased by the owner of the facility, rather than the land owner, all property within the project boundary must be included in a recorded easement(s), lease(s), or consent agreement(s) specifying the applicable uses for the duration of the project. Acceptance by all land owners adjacent or part of the project must be in place prior to commencing construction.
3. Complaint Tracking, Publishing, and Resolution: The SES applicant shall hire a Township-approved Complaint Vendor to submit a detailed, written complaint, web-based resolution process developed by the applicant to resolve complaints from the Township Board, property owners, or residents concerning the construction or operation of the Commercial or Large-Scale Solar Energy System.
- a. The Complaint Vendor shall report to the Township Board
  - b. The applicant shall maintain a \$10,000 fund provided to the Township Clerk to support the Complaint vendor to manage a public website that includes a time stamped log of complaints. Methods of contact shall include voice, text, and email.
  - c. The Township shall have management control of the complaint website and oversight of hosting company. The applicant shall not be permitted to edit, change, or control the site.
  - d. The applicant shall log into site and update status of each complaint's resolution.
  - e. A complaint investigation escrow account shall be set up for investigation of complaints including, but not limited to, stray voltage, noise, signal interference, or adverse reflected glare. The solar facility owner shall maintain the amount of \$20,000 in this account to be used at the discretion of the Township Board. This fund must be replenished by the applicant or SES owner at any point the balance falls below \$10,000.
  - f. Inclusion of a flow chart showing complaint response protocol including: (1) a time limit for acting on and resolving complaints (2) how complaints are recorded and dealt with, and (3) a provision specifying that resolution in some instances shall include rendering the unit inoperable.
4. Abandonment and Decommissioning
- a. Following the operational life of the SES, or following abandonment or non-operation for a period of 1 year, the applicant shall perform decommissioning and removal of all equipment and components associated with the Commercial or Large-Scale Solar Energy Systems:
    - 1) Land shall be returned to the state and function it was in prior to the solar installation. Applicant must provide agronomy data to substantiate health and function of land.

- 2) All underground components, foundations, and ancillary equipment must also be removed unless written permission is obtained from the landowner to retain those underground components that are 48 inches or more below grade. In no way shall this be construed to allow decommissioned solar panels to remain.
  - 3) All fencing must be removed during decommissioning unless written permission is obtained from the landowner to the contrary.
  - 4) All access roads or driveways shall be removed, cleared, and graded by the applicant, unless the property owner(s) request, in writing, desires to maintain any access road or driveways.
  - 5) All structures, concrete, piping, equipment, and other project related materials above-grade and below-grade shall be removed offsite for disposal. The Township or County will not be assumed to take ownership of any access road or driveway.
  - 6) The ground must be restored to its original topography, vitality, and health within 180 days of Township notice of abandonment or decommissioning.
- b. The decommissioning plan shall also include an agreement between the applicant and the Township that:
- 1) Prior to the issuance of the permit, the applicant shall furnish to the Township a Professional Engineer's estimate of decommissioning costs from three (3) non-applicant related independent sources along with a detailed process plan. A performance guarantee in an amount equal to or greater than one hundred fifty percent (150%) of the estimated averaged cost of decommissioning shall be approved by the Township. The Township Board reserves the right to adjust the required performance guarantee every two (2) years at the rate of 1.5 times CPI (consumer price index) for each year and the applicant must fund appropriate escrow accounts.
    - (a) The security bond, escrow, or irrevocable letter of credit shall provide coverage (pre-paid) for the entire project lifespan, be issued by a 3rd party, and paid by the operator by deposit or filed with the Township after a permit has been approved but before construction commences on the Solar Energy System installation. Land leases, easements or similar shall be used to estimate the project lifespan. The guarantee shall be posted and maintained with a company licensed to do business in the State of Michigan or a Federal-State chartered lending institution acceptable to the Township.
    - (b) Any bonding agency or lending institution shall provide the Township with a 180 day notice of the expiration of the security bond or escrow. Lapse of a valid security bond or escrow account shall immediately cause revocation of all SES permits issued by the Township to the applicant and the applicant shall cease operation immediately. The Township shall take any necessary action permitted by law against assets of SES facilities or a parent company.

- (c) In the event of a sale or transfer of ownership of the SES, the original security bond or escrow shall be maintained throughout the entirety of the sale process and shall not be altered until replaced by the new owner(s) in accordance with this ordinance.
  - c. The Township shall have access to the escrow account funds for the expressed purpose of completing decommissioning if decommissioning is not completed by the applicant within three hundred sixty-five (365) days of the end of the project life or system abandonment.
  - d. Township officials or the Board's designated representative is granted the right of entry onto the site, pursuant to reasonable notice, to effect or complete decommissioning.
  - e. In the event the current Commercial or Large-Scale Solar Energy System owner defaults on any or all of the requirements or other parts of this Solar Energy System ordinance, the property owner upon which any solar energy equipment is located shall be responsible and liable for the removal of said equipment and restoration of the property as required by this ordinance. Failure of the property owner's compliance with the decommissioning requirements shall result in the Township having the equipment removed at the expense of the property owner. If funding is not available to cover the costs of removal by the property owner, legal action to pursue the seizure of the property(s) will take place to recover such costs.
  - f. The property owner may waive the complete removal of the access road if the property owner executes a waiver and records the same in full with the Clare County Register of Deeds.
  - g. The Township is granted the right to seek injunctive relief to effect or complete decommissioning, as well as the Township's right to seek reimbursement from applicant or applicant successor for decommissioning costs in excess of the amount deposited in escrow and to file a lien against any real property owned by applicant or applicant's successor, or in which they have an interest, for the amount of the excess, and to take all steps allowed by law to enforce said lien.
5. Inspections
- a. The Township shall have the right to provide 24-hour notice to the applicant to inspect, at any reasonable time, the premises on which any SES is located. The Township may hire one or more consultants to assist with inspections at the applicant's or project owner's expense. Inspections must be coordinated with, and escorted by, the applicant's operations staff at the SES.
  - b. Applicant shall provide, upon the request of the Township, system control data logs based on hourly summary increments. Data elements shall include, but are not limited to, input/output volts, amperage, frequency, time-stamp, source, subsystems, location. Applicant shall have no more than thirty (30) days to provide data. The Township may request additional data elements.



6. Maintenance and Repair

Each Commercial or Large-Scale Solar Energy System must be kept and maintained in good repair and condition at all times. If the Township Board determines that a SES fails to meet the requirements of this ordinance, the Board shall provide notice to the applicant of the non-compliance and the Applicant has 30 days to resolve the elements of the failure. If the non-compliance is a safety hazard as determined by the Township Board, the Applicant shall have seven (7) days to resolve it. If Applicant has not remedied non-compliance issues within the aforementioned time periods, the Applicant shall immediately shut down the Solar Energy System and not operate, start, or restart the Solar Energy System until the issues have been resolved. Applicant shall keep a maintenance log on the solar arrays, which shall be available for the Township's review within 48 hours of such request. Applicant shall keep all property within the Solar Energy System facility neat, clean, and free of refuse, waste, or unsightly, hazardous, or unsanitary conditions.

7. Roads

Any material damages to a public road located within the Township resulting from the construction, maintenance, or operation of a SES shall be repaired within 60 days at the applicant's expense. The Applicant shall submit to the State of Michigan or the Clare County Road Commission a description of the routes to be used by construction and delivery vehicles and road improvements that will be necessary to accommodate construction vehicles, equipment, or other deliveries. The Applicant shall abide by all State and County requirements regarding the use and repair of the roads.

8. Compliance with Additional Codes, Regulations, and Certifications

- a. Solar Energy facilities and the installation and use thereof, shall comply with the State construction code, the electrical code, and other applicable Local, County, State, and Federal codes.
- b. No breaking ground, construction, or installation, for a Commercial or Large-Scale Solar Energy System may commence until all necessary permits have been issued for the entire project.
- c. Certification will be provided that the Applicant has complied with or will comply with all applicable state and federal laws and regulations.
- d. A list of all planned and anticipated local, state, federal permits, required authorizations, or approvals related to the project must be provided to the Township at time of application submittal. The Applicant shall continue to submit copies of all such permits and approvals that have been applied for and obtained as they are received by the Applicant.
- e. The Applicant will provide certification that the system complies with or will comply with guidelines and regulations for setbacks as required by any and all registered airports, airfields or landing strips, public or private, within the township and as required for any public airport in the State of Michigan as established by MDOT and the FAA and complying with the Michigan Tall Structures Act (Public Act 259 of 1959).

9. Remedies

If an Applicant or operator fails to comply with this Ordinance, the Township, in addition to any other remedy allowed under this Ordinance, shall immediately revoke its permit after giving the Applicant or operator reasonable notice and an opportunity to be heard. If the Applicant cannot provide a compliance solution with forty-five (45) days, the Applicant shall immediately move the SES off-line until proof of compliance is provided. The Township may require reinitiating permit application process if a compliance issue affects the operational aspects of the existing system or requires different systems that may affect previous permit terms. Additionally, the Township may pursue legal or equitable action to abate a violation and recover any and all costs, including the Township's actual attorney fees and costs.

Any person, firm or corporation that violates, neglects, or refuses to comply with or resists the enforcement of any of the provisions of this Ordinance, is responsible for a municipal civil infraction and shall be punished by a fine not to exceed One Hundred (\$100.00) dollars, attorneys fees and costs. Each day that a violation is permitted to exist shall constitute a separate offense. The imposition of any sentence shall not exempt the offender from compliance with the requirements of this Ordinance. Uses of land in violation of any provision of this Ordinance, are hereby declared to be a nuisance per se.

The Court may order such nuisance abated and the applicant, operator, landowner, and/or agent in charge of such land may be adjudged guilty of maintaining a nuisance per se, and same may be abated by order of any court of competent jurisdiction.

**Section 4. Validity and Severability.**

If any portion of this Ordinance is found invalid for any reason, such holding shall not affect the validity of the remaining portions of this Ordinance.

**Section 5. Repealer.**

All other ordinances inconsistent with the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

**Section 6. Effective Date.**

This Ordinance shall be published and take effect 30 days after publication as prescribed by law.

The undersigned Supervisor and Clerk of the Township of Sheridan hereby certify that this Ordinance was duly adopted by the Township Board at a meeting held on the \_\_\_\_\_ day of \_\_\_\_\_, 2023, and was published in the Clare County Review on the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
Township Supervisor

\_\_\_\_\_  
Township Clerk