

ORDINANCE NO. 2023-03

**AN ORDINANCE OF THE TOWNSHIP OF SWATARA, LEBANON COUNTY, PENNSYLVANIA, CODE OF ORDINANCES CHAPTER 27, AMENDING PART 1 DEFINITIONS OF THE SWATARA TOWNSHIP ZONING ORDINANCE BY ADDING A DEFINITION FOR "DWELLING," "DWELLING, MOBILE HOME," "DWELLING, MODULAR HOME," "DWELLING, MULTIPLE FAMILY," "DWELLING, SEASONAL", AND "DWELLING, TOWNHOUSE," REPEALING AND REPLACING THE DEFINITIONS FOR "DWELLING, SINGLE FAMILY DETACHED," "DWELLING, TWO-FAMILY," AND "DWELLING UNIT" AND ELIMATING DEFINITIONS FOR "DWELLING, SINGLE FAMILY SEMIDETACHED," "DWELLING, TWO FAMILY SEMIDETACHED," "MOBILE HOME," "MODULAR HOME," AND "TOWNHOUSE"; AMENDING PART 6, AGRICULTURAL, PART 11, COMMERCIAL, AND PART 12, INDUSTRIAL, TO ALLOW SOLAR, WIND, AND ALTERNATIVE ENERGY AS A CONDITIONAL USE SUBJECT TO CERTAIN CONDITIONS; AND REPEAL AND REPLACE PART 15, ENVIRONMENTAL IMPROVEMENTS AND ENERGY CONSERVATION REQUIREMENTS, PROVIDING FOR DEFINITIONS, REGULATIONS AND EXEMPTIONS FOR THE USE AND DECOMMISSIONING OF PRINCIPAL SOLAR ENERGY SYSTEMS, ESTABLISHING GUIDELINES FOR THE USE OF ACCESSORY SOLAR, WIND, AND ALTERNATIVE ENERGY SYSTEMS, ALLOWING FOR VARIANCES, AND MANDATING PERMITS.**

WHEREAS, the Second Class Township Code authorizes the Board of Supervisors to plan for development of the Township through zoning, subdivision and land development regulations under the Pennsylvania Municipalities Planning Code, 53 P.S. §66517, *et seq.*; and

WHEREAS, the Board of Supervisors believe it in the best interest of Swatara Township to amend the Swatara Township Zoning Ordinance to promote consistency and clarity, throughout the zoning ordinance, with regards to certain definitions, allow for solar, wind and alternative energy as a conditional use in

certain zoning districts, and modify Part 15, Environmental Improvements and Energy Conservation Requirement, based on the technological advancements; and

WHEREAS, the Board of Supervisors held a Public Hearing on the proposed Zoning Ordinance on August 10, 2023, pursuant to requirements set forth in the Pennsylvania Municipalities Planning Code, 53 P.S. §10609, *et seq.*; and

WHEREAS, a copy of the proposed Zoning Amendment was submitted to the Township Planning Commission and the Lebanon County Planning Department at least forty-five (45) days prior to the Hearing held on August 10, 2023.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED, and it is hereby enacted and ordained by the Board of Supervisors of the Township of Swatara, Lebanon County, Pennsylvania, as follows:

1. The following definitions shall be added to Chapter 27, Zoning, Ordinance, Part 1:

DWELLING—Any structure or portion thereof, which is designed or used for residential purposes. The term dwelling shall not be deemed to include motel, boarding or room house, bed and breakfast inn, hotel, hospital, or nursing home.

DWELLING, MOBILE HOME—A single-family detached factory manufactured dwelling built on a chassis. A mobile home shall be constructed to remain a mobile home, subject to all regulations applying thereto, whether or not wheels, axles, hitch, or

other appurtenances of mobility are removed and regardless of the nature of the foundation provided.

**DWELLING, MODULAR HOME**—A structure intended for permanent occupancy as a dwelling consisting of prefabricated sections or components constructed according to nationally recognized building codes at another and transported to the site for assembly, placement upon and attachment to a permanent foundation.

**DWELLING, MULTIPLE FAMILY**—A building designed for or containing two or more dwelling units, sharing access from a common hall, stair, or balcony.

**DWELLING, SEASONAL**—A dwelling intended for occupancy only occasionally during the year, with an intended use for hunting, fishing, camping, cabin, and similar uses. For the purpose of this Ordinance, a recreational vehicle shall not be considered a seasonal dwelling.

**DWELLING, TOWNHOUSE**—A "single-family attached dwelling" of three or more adjoining dwelling units, each of which is separated from the other by one or more unpierced firewalls from ground to roof, having individual outside access. Rows of attached townhouses shall not exceed eight dwelling units.

2. The following definitions in Chapter 27, Zoning, Ordinance, Part 1 shall be repealed and replaced with the following:

**DWELLING, SINGLE FAMILY DETACHED**—A dwelling designed for and occupied by not more than one family and having no roof, wall, or floor in common with any other dwelling unit and having private yards on all four sides of the house.

**DWELLING, TWO-FAMILY**—Two dwelling units, each of which is attached side to side, or one above the other, each one sharing only one common wall with the other. Each unit shall have individual access to the outside.

**DWELLING UNIT**—A residential unit providing complete, independent living facilities for one family including permanent provisions for living, sleeping, eating, cooking, and sanitation.

3. The following definitions shall be deleted and repealed from Chapter 27, Zoning, Ordinance, Part 1:

DWELLING, SINGLE FAMILY SEMIDETACHED  
DWELLING, TWO FAMILY SEMIDETACHED  
MOBILE HOME  
MODULAR HOME  
TOWNHOUSE

4. The following language shall be added as a conditional use in Chapter 27, Zoning, Part 6, Agricultural, §27-602(2)(I), Part 11, Commercial, §27-1102(3)(B) and Part 12, Industrial, §27-1202(3)(B):

“Principal Solar Energy Systems (PSES), subject to the criteria set forth in §27-1502.”

5. Chapter 27, Zoning, Part 15, Environmental Improvements and Energy Conservation Requirement, is hereby repealed and replaced as follows:

#### **PART 15—SOLAR, WIND, ALTERNATIVE ENERGY AND PLANTING**

##### **§27-1501. Definitions.**

The following terms are specifically defined for use within this Part.

**ACCESSORY SOLAR ENERGY SYSTEM**—An area of land or other area used for a solar collection system used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for on-site use. An accessory solar energy system consists of one (1) or more free standing ground, or roof mounted solar arrays or modules, or solar related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

**DENSE SCREEN PLANTING**—A landscaped barrier consisting of predominately (80% or more) coniferous trees and shrubs, hedges, earth mounding, walls or a combination thereof established at a minimum height of six (6) feet. Such environmental buffer shall provide a solid visual, noise and pollutant barrier between potentially incompatible uses. Dense screen plantings shall be at least five (5) feet in width with irregularly spaced double or triple rows of plants and shrubs to obtain a dense, solid mass.



**GLARE**—The effect produced by light with intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

**INTERIOR ISLAND PLANTING**—A durable landscaped planting area located within a vehicular use area or parking lot. Design and location shall provide shade and visual separation of parking and pedestrian areas, improve air quality, and control stormwater runoff from large paved areas. An island or strip shall be a minimum of 50 square feet in area, at least five (5) feet in width and contain at least (1) shade tree per 40 lineal feet of island or fraction thereof. Islands of 40 feet or less in length shall contain at least one (1) shade tree. The remaining area within the island or strip shall be appropriate landscaped with grass, mulch, stones, plants, or other materials not exceeding three (3) feet in height.

**PERIMETER PLANTING**—A landscape planting consisting of trees and shrubs established at less than three (3) feet or greater than six (6) feet in height, so it shall not interfere with any clear sight triangle. Such planting shall separate streets and vehicular use areas from parking lots, buildings, and other interior improvements. Perimeter plantings shall consist of individual trees or shrubs spaced a maximum of 50 feet apart to form a linear vegetative border, with grass or ground cover continuously thereunder.

**PRINCIPAL SOLAR ENERGY SYSTEM (PSES)**—An area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for off-site use. Principal solar energy systems consist of one (1) or more free-standing ground, or roof mounted solar collector devices, solar related equipment and other accessory structures and buildings including light reflectors, concentrators, heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

**SCREEN PLANTING**—A landscaped planting consisting of a mixture of coniferous trees or shrubs, shade trees, ornamental trees or shrubs, earth mounding, hedges or a combination thereof established at a minimum height of six (6) feet. Such planting shall separate and protect uses from noise, odor, and dust, as well as moderating the effects of winter winds and summer heat. Screen plantings shall be at least three (3) in width with regularly spaced trees and shrubs to obtain a pervious, moderately dense planting.

**SOLAR EASEMENT**—A solar easement means a right, expressed as an easement, restriction, covenant, or condition contained in any deed, contract, or other written

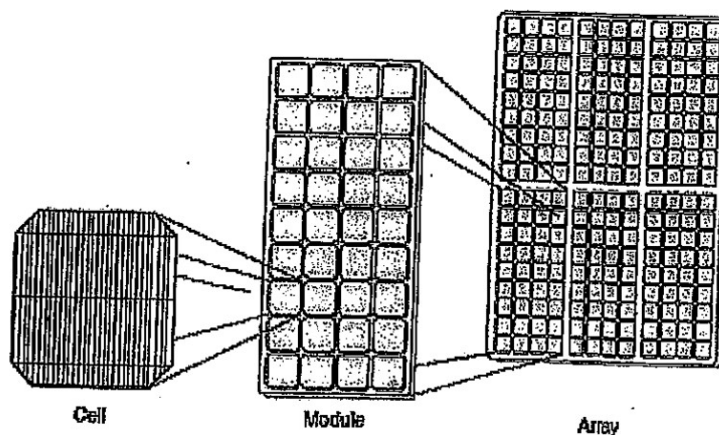
instrument executed by or on behalf of any landowner for the purpose of assuring adequate access to direct sunlight for solar energy systems.

**SOLAR ENERGY**—Radiant energy (direct, diffuse and/or reflective) received from the sun.

**SOLAR PANEL**—That part or portion of a solar energy system containing one or more receptive cells or modules, the purpose of which is to convert solar energy for use in space heating or cooling, for water heating and/or for electricity.

**SOLAR RELATED EQUIPMENT**—Items including a solar photovoltaic cell, module, panel, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing and possibly foundations or other structures used for or intended to be used for collection of solar energy.

1. Solar Array—A grouping of multiple solar modules with purpose of harvesting solar energy.
2. Solar Cell—The smallest basic solar electric device that generates electricity when exposed to light.
3. Solar Module—A grouping of solar cells with the purpose of harvesting solar energy.



WIND ENERGY CONSERVATION SYSTEM—A device with converts wind energy to mechanical or electrical supply; commonly referred to as windmills.

WIND ROTOR—The blades, plus hubs to which the blades are attached, that are used to capture wind for the purpose of energy conversion. The wind rotor is used on a pole or tower along with other generating and electrical storage equipment and forms a wind energy conversion system.

**§27-1502. Principal Solar Energy Systems (PSES).**

1. General Standards. PSES shall be permitted as a conditional use in the Agricultural, Commercial and Industrial Zoning Districts and shall satisfy the following minimum general standards. T
  - A. The PSES layout, design and installation shall conform to applicable industry standards, such as those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory (ETL), Florida Solar Energy Center (FSEC) or other similar certifying organizations, and shall comply with the PA Uniform Construction Code as enforced by the Township and with all other applicable fire and life safety requirements.
  - B. The underground placement of on-site transmission lines and plumbing lines shall be utilized whenever possible consistent with the standard industry practices.
  - C. The owner of a PSES shall provide the Township with a written acknowledgement from the public utility company or the Regional Transmission Operator (RTO) to which the PSES will be connected that they have been informed of the customer's intent to install a grid connected PSES to their facilities.
  - D. No portion of the PSES shall contain or be used to display advertising. The manufacturer's name and equipment information or indication of

ownership shall be allowed on any equipment of the PSES provided they comply with the prevailing sign regulations.

- E. All PSES shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. The applicant has the burden of providing that any glare produced does not have significant adverse impact on neighboring or adjacent uses.
- F. A noise study will be performed and included in the application. The noise study will be performed by an independent noise study expert and paid for by the applicant. Noise from a PSES shall not exceed 50dBA, except during construction, as measured at the property line of non-participating landowners.
- G. No trees or other landscaping otherwise required by the municipal ordinance or attached as a condition of approval of any plan, application, or permit may be removed for the installation or operation of a PSES.
- H. The PSES owner and/or operator shall maintain a phone number and identify a person responsible for the public to contact with inquiries and complaints throughout the life of the project and provide this number and name to the Township. The PSES owner and/or operator shall make reasonable efforts to respond to the public's inquiries and complaints.
- I. A Contingency Plan of Emergency Procedures shall be developed by the PSES owner consistent with standard operating practices of the industry and furnished to the Township, the local fire company and the County Department of Emergency Services.
- J. At the time of issuance of the permit for the construction of the PSES, the owner shall provide evidence that financial security will be in place at the start of commercial operation in the form and amount of a bond, irrevocable letter of credit, or other financial security acceptable to the Township to secure the expense of dismantling and removing said PSES and restoration of the land to its original condition, in the amount of 110% of the estimated decommission cost minus the salvageable value. Every 5 years a new engineer's estimate of probable cost of decommissions shall be submitted for approval in the same manner as the initial submission and the bond, letter of credit, or other financial security

acceptable to the Township shall be adjusted upward or downward as necessary.

K. Prior to the issuance of a zoning permit, PSES applicants must acknowledge in writing that the issuing of said permit shall not and does not create in the property owner, its, his, her or their successors and assigns in title or, create in the property itself: (a) the right to remain free of shadows and/or obstructions to solar energy caused by development of adjoining or other property or the growth of any trees or vegetation on such property, except as is otherwise agreed to in writing with any participating landowner; or (b) the right to prohibit the development on or growth of any trees or vegetation on such property, except as is otherwise agreed to in writing with any participating landowner.

2. Exemptions. PSES constructed prior to the effective date of this Section shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to an existed PSES, whether or not existing prior to the effective date of this Section that materially alters the PSES shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

3. Decommissioning.

A. The PSES owner is required to notify the Township immediately upon cessation or abandonment of the operation. After the start of commercial operations of the PSES, the PSES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of twelve (12) continuous months.

B. The PSES owner shall then have twelve (12) months in which to dismantle and remove the PSES including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, roads, foundations and other associated facilities from the property. If the owner fails to dismantle and/or remove the PSES within established timeframes, the municipality may complete the decommissioning at the owner's expense. The Township may authorize one twelve (12) month extension for just cause shown by the PSES owner.

4. Permit Requirements.

- A. PSES shall comply with the Township subdivision and land development requirements. The installation of PSES shall be in compliance with all applicable permit requirements, codes and regulations.
- B. The PSES owner and/or operator shall repair, maintain and replace the PSES and related solar equipment during the term of the permit in a manner consistent with industry standards as needed to keep the PSES in good repair and operation condition.

5. Ground Mounted Principal Solar Energy Systems.

A. Minimum lot size—Five (5) acres.

B. Minimum Yards.

- (1) PSES shall comply with the following minimum yards.

Fence: 25 ft.

Panels

Front: 50 ft.

Side: 50 ft.

Rear: 50 ft.

- (2) In all cases there shall be minimum distance of 100 (one-hundred) feet between adjacent non-participating, residential structures and any component of the PSES including fences, buildings, panels, and other equipment.

- (3) The minimum side and rear yards specified above may be waived in the case of adjoining tracts of land within a single PSES.

C. Height. Ground mounted PSES shall not exceed 20 feet in height.

D. Impervious Coverage.

- (1) The area beneath the ground mounted PSES is considered pervious cover. However, the use of impervious construction materials under the system could cause the area to be considered impervious and subject to the impervious surfaces limitations for the applicable Zoning District.
- (2) The following components of a PSES shall be considered impervious coverage and calculated as part of the impervious coverage limitations for the underlying zoning district:
  - (a) Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
  - (b) All mechanical equipment of PSES including any structure for batteries or storage cells. FOR ZONING PURPOSES ONLY, the solar modules themselves, however, are not included as impervious cover.
  - (c) Gravel or paved access roads servicing the PSES.
- (3) PSES owners are required to follow the current Pennsylvania Department of Environmental Protection Guidelines for Solar Collectors as a best management practice for storm water management.
- (4) Ground mounted PSES shall be screened from non-participating adjoining residential uses unless landowner waives such requirement. Also highly trafficked sections of road, shall be screened as determined by the Township. The location and specifications for required screening shall be indicated on the land development plan.
- (5) In an Agricultural Zoning District, no more than 20 percent of the entire area for development shall consist of Class I and Class II prime agricultural soils as defined by the current version of the NRCS Custom Soil Resource Report.
- (6) Ground-mounted PSES shall not be placed within any legal easement or right-of-way location, or be placed within any

storm water conveyance system or in any other manner that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

E. Security.

- (1) All ground-mounted PSES shall be completely enclosed by a minimum six (6) foot high fence and gates shall have locks.
- (2) A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence of the surrounding the PSES informing individuals of potential voltage hazards.

F. Access.

- (1) At a minimum, a 25" wide access road must be provided from a state or township roadway into the site.
- (2) Service roads, at a minimum 16' width, shall be provided to allow access for maintenance vehicles and emergency management vehicles including fire apparatus and emergency vehicles.
- (3) The ground-mounted PSES shall not be artificially lighted except to the extent required for safety or applicable federal, state, or local authority.
- (4) If a ground-mounted PSES is removed, any earth disturbance resulting from the removal must be graded and reseeded.

G. Roof and Wall Mounted Principal Solar Energy Systems.

- (1) For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and adopted building code of the township that the roof or wall is capable of holding the load imposed on the structure.



- (2) PSES mounted on the roof or wall of any buildings shall be subject to the maximum height regulations of the underlying zoning district.

**§27-1503. Solar, Wind and Alternate Energy Standards.**

1. The use of accessory solar, wind and alternate energy systems is encouraged within these regulations and permitted within any zoning district. Although the installation of such systems is not mandatory, where they are utilized, the following standards shall apply:
  - A. Accessory Solar Energy Systems, wind energy systems and similar alternate energy systems, including customary energy storage accessories, shall be permitted for the product collection, movement, distribution or storage of heated water, air or other medium which is intended for conveyance to a principal or accessory building. Systems may include the following, subject to the requirements contained herein:
    - (1) Solar Panels with a combined glazing area of 65 square feet or less, provided that:
      - (a) Accessory solar panels shall not extend more than five feet into any required yard when attached to a principal structure; and
      - (b) The solar panels shall be a minimum of three feet from any property line, whether freestanding or attached.
    - (2) Solar Panels with a combined glazing area in excess of 65 square feet, provided that:
      - (a) Solar panels attached to a principal structure shall comply with the zoning setbacks prescribed for a principal structure in the applicable zoning district; and

- (b) Solar panels which are freestanding or attached to an accessory structure shall comply with the accessory structure requirements of §27-1402 of this Chapter.
- (3) Solar greenhouses attached to principal structures shall meet all yard requirements for a principal structure in the applicable zoning district. Solar greenhouses attached to accessory structures shall meet all yard requirements specified for accessory structures in §27-1402 of this chapter.
- (4) Detached solar greenhouses shall meet all yard requirements specified for accessory structures in §27-1402 of this chapter.
- (5) Wind energy conservation systems, provided that:
  - (a) The structure supporting the wind rotor unit shall be located a minimum distance of the tower height (measured from the ground to the top of the rotor) plus 15 feet from any property line or street right-of-way. The height of such structures shall not exceed 75 feet.
  - (b) Towers may be ground-or roof mounted and shall be securely fastened as per manufacturer's specifications or a demonstrable equivalent to achieve maximum safety and prevent collapse or fall. Any propeller or turning device that reacts to wind velocity shall have a governor to control the speed of revolutions. Such governors may include a rudder that turns the propeller away from the wind, individually sprint-mounted paddles that turn away from the wind, or other suitable manufacturer's tested device. Towers shall be locked or secured to prevent unauthorized access, and in no case shall a permanently mounted ladder be affixed less than ten (10) feet from the grade level.

**§27-1504. Maintenance and Protection Assurances.**

1. The improvements required and permitted within this Part shall be maintained and protected to assure their environmental benefits. The following specific requirements shall apply:

A. Maintenance.

1. Plantings. All required plantings shall be maintained in a good condition to present a healthy, neat and orderly appearance. Such plantings shall be kept free from refuse and debris. Plants damaged by insects, disease, vehicular traffic, acts of nature or vandalism shall be replaced by the next planting period.
2. Energy Systems. Energy systems shall be maintained in a safe manner. Broken glass or other potentially hazardous conditions shall be promptly repaired. A disconnected or abandoned accessory solar, wind or alternate energy system shall be removed from the property within 60 days of such abandonment.

B. Protection.

1. Plantings. Required plantings shall not be removed except to facilitate the planting of acceptable plants. Property improvements shall be protected at all times by such environmental plantings and extensive trimming or pruning of the plants to reduce or eliminate the protection shall not be permitted.
2. Energy Systems. Where a solar or wind energy system has been installed, it shall be the responsibility of the property owner to secure any easement or restrictive covenants necessary to protect the sky-space affecting the solar or wind system. Such an agreement shall be negotiated between owners of affected properties, but it is not a requirement for approval of a building and/or zoning permit for the solar or wind energy system.

**§27-1505. Variances.**

1. The following factors shall be considered, in addition to those within §27-2505 of this Chapter, when revising petitions for variances to the provisions of this chapter:
  - A. Variances shall be granted only for minimum relief and not for purely financial reasons.
  - B. Variances to planting requirements shall not request relief from planting height, quality or maintenance.
  - C. Variances for energy systems shall allow for effective placement of energy systems, provided that the skyspace of adjoining property owners is not restricted.
  - D. Variances shall consider the resulting effect on the microclimate on the property.
  - E. Variances shall consider possible damage to utilities.

**§27-1506. Plans and Permits.**

1. Plans. Plans depicting environmental and energy improvements shall be submitted at the time of application for a building and zoning permit. Information may be included on the required plot plan specified in §27-2003 of this chapter or submitted on a separate plan. In addition to the information required within §27-2003 of this chapter, plans shall include:
  - A. Location, size and species of existing plant material.
  - B. Delineation of plants to be removed and plants to be retained.
  - C. Location, planting size, mature size and species of all plants within required plantings.
  - D. Proposed treatment of all ground surfaces (e.g., paving, grass, gravel, mulch, stone).

2. Building and Zoning Permits. A building and zoning permit shall be required for installation, expansion or alteration to any of the environmental improvements and energy systems described within this Part. Applicable procedures of Part 20 of this Chapter shall apply during the processing of such permit applications. Where desired, the Zoning Officer may refer plans to the Planning Commission and Lebanon County Conservation District, or to the other applicable agencies for review and comment prior to the formal action on the permit application.

6. The provisions of this Ordinance are severable. If any sentence, clause or section of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality, or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses or sections of this Ordinance. It is hereby declared to be the intent of the Board of Supervisors of Swatara Township that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause or section not been included herein.

7. All Ordinances or parts of Ordinances inconsistent herewith are hereby repealed.

8. This Ordinance shall become effective five (5) days after its passage or adoption.

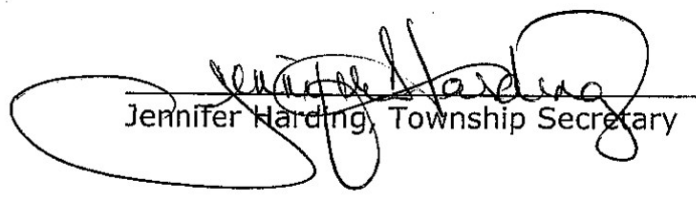
ORDAINED AND ENACTED into law this 10<sup>th</sup> day of August,  
2023.

TOWNSHIP OF SWATARA

By   
Richard Kretzer, Chairman

[Township Seal]

Attest:

  
Jennifer Harding, Township Secretary