# METAL TOWNSHIP ORDINANCE NO. 2024 -

# AN ORDINANCE OF METAL TOWNSHIP, FRANKLIN COUNTY, PENNSYLVANIA, ENACTING SOLAR PANEL REGULATIONS FOR METAL TOWNSHIP.

WHEREAS, Section 607 of the Pennsylvania Second Class Township Code, as amended, (53 P.S. 65607) requires the Metal Township Supervisors to secure the health, safety and welfare of the citizens of the township; and

WHEREAS, Section 1506 of the Pennsylvania Second Class Township Code, as amended, (53 P.S. 66506) empowers the Metal Township Supervisors to make and adopt any Ordinances necessary for the proper management, care and control of the Township and the maintenance of peace, good government, health and welfare of the Township and its citizens, trade, commerce, and manufacturers; and

WHEREAS, the Metal Township Board of Supervisors deem it to be in the best interests of the public health and welfare of its citizens that the following solar panel regulations be enacted.

NOW, THEREFORE, by the authority of and pursuant to the provisions of the "Pennsylvania Second Class Township Code", Act of May 1, 1933 (P.L. 103, No. 69) as amended, be it enacted and ordained by the Metal Township Board of Supervisors of Franklin County, Pennsylvania, that a new Ordinance entitled "Metal Township Solar Panel Regulations" is enacted. The text of the Ordinance is as follows:

# **SECTION I: DEFINITIONS.**

The following definitions shall apply to this Ordinance:

Accessory Solar Energy System (ASES) – 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 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. Ground mounted or freestanding Solar Energy Systems with an output size of not greater than 15kw shall be considered Accessory Solar Energy Systems. Roof Mounted Solar Energy Systems on the roofs of buildings on-site used primarily for on-site use shall have no limit as to energy output.

Agrivoltaics – The co-development of the same area of land for both solar photovoltaic power and conventional agriculture. However, activities directly related to solar photovoltaic power development and use and structures related to any Accessory Solar Energy System (ASES) or Principal Solar Energy System (PSES) shall not be construed as part of a "normal agricultural operation" as defined by 3 P.S. §952, and the production of energy

from any portion of the ASES or the PSES s hall not be construed as part of a "normal agricultural operation" as defined by 3 P.S. §952 or as an "agricultural commodity" as defined by 3 P.S. §952.

<u>Applicant</u> – A landowner or developer, as hereinafter defined, who has filed an application concerning a Solar Energy System, as hereinafter defined, development, including his heirs, personal representatives, successors and assigns.

<u>Cartway</u> – The portion of a street intended for vehicular use.

<u>Glare</u> – The effect produced by light with an intensity sufficient to cause annoyance, discomfort, or loss in visual performance and visibility.

<u>**DEP**</u> – The Pennsylvania Department of Environmental Protection.

<u>Developer</u> – Any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made an application concerning a Solar Energy System, as hereinafter defined, development.

Landowner (Owner) – The legal or beneficial owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land, shall be deemed to be a landowner for the purposes of this Ordinance; provided however, that no person shall be entitled to act in the capacity of a landowner absent without the prior written consent of the legal owner so to act.

<u>Principal Solar Energy System (PSES)</u> – 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, and heat exchangers, substations, electrical infrastructure, transmission lines and other appurtenant structures.

<u>Principal Use</u> – The main or primary use of land or structures.

<u>Right-of-way</u> – Land set aside for public use as a street, crosswalk, or other common means of communication and travel.

<u>Solar Easement</u> – 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 purposes of ensuring adequate access to direct sunlight for solar energy systems.

<u>Solar Energy System</u> – A device or design feature or features, a substantial purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, electricity generation, or water cooling.

Solar Energy - Radiant energy (direct, diffuse and/or reflective) received from the sun.

<u>Solar Energy System</u> – A device or design feature or features, a substantial purpose of which is to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power.

<u>Solar Panel</u> – 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.

<u>Solar Project Area</u> – The total area of land including the Principal Solar Energy System, the space between solar arrays, stormwater management area, access drives, fencing and internal access roads. The Solar Project Area does not include any associated setbacks, buffer yards, or any area set aside for agricultural uses and designed to be adequate for the maneuverability of typical farm equipment.

<u>Solar Related Equipment</u> – 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 which generates electricity when exposed to light.
- 3. Solar Module: A grouping of solar cells with the purpose of harvesting solar energy.

<u>Township</u> - The Township of Metal, Franklin County, Pennsylvania.

<u>Township supervisors</u> (Supervisors) - The Supervisors of the Township of Metal, Franklin County.

# SECTION II: ACCESSORY SOLAR ENERGY SYSTEMS (ASES).

#### A. Regulations Applicable to all ASES.

1. ASES that have a maximum power rating of not greater than 15kW shall be permitted. ASES that have a power rating greater than 15kW shall comply with the requirements of Sub-Section III of this Ordinance – Principal Solar Energy Systems.

#### 2. Exemptions

- (a) ASES with an aggregate collection and/or focusing area of ten (10) square feet or less are exempt from this Ordinance.
- (b) ASES constructed prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to an existing ASES, whether or not existing prior to the effective date of this Ordinance that materially alters the ASES, shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

#### 3. Permit Requirements

- (a) Land Use Permit applications shall document compliance with this Ordinance and shall be accompanied by drawings showing the location of the system on the building or property, including property lines. Permits must be kept on the premises where the ASES is constructed.
- (b) The Land Use Permit shall be revoked if the ASES, whether new or pre-existing, is moved or otherwise altered, either intentionally or by natural forces, in a manner which causes the ASES not to be in conformity with this Ordinance.
- (c) The ASES must be properly maintained and be kept free from all hazards, including but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety, or general welfare. In the event of a violation of any of the foregoing provisions, the Township shall give written notice specifying the violation to the owner of the ASES to conform or to remove the ASES.

#### 4. Decommissioning

(a) Each ASES and all solar-related equipment shall be removed within twelve (12) months of the date when the use has been discontinued or abandoned by the system owner and/or operator, or upon termination of the useful life of same. The solar energy system owner is required to notify the Township immediately upon cessation or abandonment of the operation.

- (b) The ASES shall be presumed to be discontinued or abandoned if no electricity is generated by such solar collector for a period of six (6) continuous months. If the Township has cause to believe the ASES has been discontinued or abandoned, the Township shall provide notice to the owner. The owner shall have ninety (90) days to respond and demonstrate that the system is operational or provide reasonable cause for discontinued operations and the proposed remedy for returning the system to operation.
- (c) The ASES owner shall, at the request of the Township, provide information concerning the amount of energy generated by the ASES in the last twelve (12) months.
- 5. The layout, design, installation and ongoing maintenance 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 Metal Township, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.
- 6. Upon completion of installation, the Accessory Solar Energy System shall be maintained in good working order in accordance with standards of the Metal Township codes under which the Accessory Solar Energy System was constructed. Failure of the property owner to maintain the solar energy system in good working order is grounds for appropriate enforcement action by the Township in accordance with applicable ordinances.
- 7. Accessory Solar Energy System installers must certify they are listed as a certified installer on the DEP's approved solar installer list, or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:
  - (a) Certification by the North American Board of Certified Energy Practitioners (NABCEP).
  - (b) Completion of the Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited Photovoltaic (PV) training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
  - (c) A registered home improvement contractor with the PA Attorney General's Office.
- 8. All on-site utilities, transmission lines, and plumbing shall be placed underground. All underground wiring and conduit shall be installed to a minimum depth of 3 feet.

- 9. The owner of a grid-connected ASES shall provide Metal Township written confirmation that the public utility company to which the Accessory Solar Energy System will be connected has been informed of the owner's intent to install a grid-connected system, and that the public utility company has approved of such connection. Off-grid systems shall be exempt from this requirement.
- 10. No portion of the Accessory Solar Energy System 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 Accessory Solar Energy System provided they comply with the prevailing sign ordinances, resolutions, or regulations.

#### 11. Glare

- (a) All Accessory Solar Energy Systems shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. Exterior surfaces shall have a non-reflective finish.
- (b) The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

#### 12. Solar Easements

- (a) An owner of an ASES may enter into solar easements with surrounding property owners. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements. Copies of all existing or proposed solar easements shall be submitted to the Township with the Land Use Permit application for the ASES. Copies of any subsequent solar easements shall be submitted to the Township within thirty (30) days of execution of that easement.
- (b) Any such easements shall be appurtenant, shall run with the land benefited and burdened, and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easements shall include, but not be limited to:
  - i. A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed.
  - ii. Restrictions on the placement of vegetation, structures and other objects which may impair or obstruct the passage of sunlight through the easement.
  - iii. Terms and conditions, if any, under which the easement may be revised or terminated.

- iv. Compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.
- (c) If required, an Accessory Solar Energy System owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).
- 13. Prior to the issuance of a Land Use Permit, applicants must acknowledge in writing (and this acknowledgement shall be submitted to the Township and placed on any required subdivision and/or land development plans) that the issuance of said permit for a solar energy system 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, the following:
  - (a) The right to remain free of shadows and/or obstructions to solar energy caused by the development of adjoining or other property or the growth of any trees or vegetation on such property.
  - (b) The right to prohibit the development on or growth of any trees or vegetation on such property.

# B. Roof Mounted and Wall Mounted ASES.

- 1. A roof mounted or wall mounted ASES may be located on a principal or accessory building.
- 2. ASES mounted on roofs or walls of any building shall be subject to the maximum height ordinances, resolutions, or regulations specified for principal, and accessory buildings.
- 3. Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying districts.
- 4. Solar panels shall not extend beyond any portion of the roof edge.
- 5. Roof mounted solar panels shall be located only on rear or side-facing roofs as viewed from any adjacent street unless the applicant demonstrates that, due to solar access limitations, no location exists other than the street-facing roof, where the solar energy system can perform effectively.
- 6. 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, and that the roof or wall is capable of holding the load imposed on the structure.

#### C. Ground Mounted ASES.

#### 1. Yard Setbacks

- (a) The minimum yard setbacks from, side and rear property lines shall be equivalent to the building setback line set forth in Metal Code section 22-25(8)(A).
- (b) Ground mounted ASES shall not be located in the required front yard.
- (c) Applicants may make a written request for the Township to authorize the installation of a ground mounted ASES in front of the principal building, outside the required front yard, if the applicant demonstrates, in writing, that, due to solar access limitations, no location exists on the property other than the front yard where the solar panel can perform effectively and provided that the applicant provide all additional vegetative screening required by the Township in lieu of the required front yard.
- 2. Height: Freestanding ground mounted ASES shall not exceed 20' in height at maximum tilt.

#### 3. Coverage

- (a) The vegetative area beneath the ground mounted ASES is considered pervious cover. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to the impervious surfaces limitations.
- (b) Gravel shall be considered an impervious cover.
- (c) The applicant shall submit a Storm Water Management Plan that demonstrates compliance with the Metal Township Stormwater Management Ordinance.
- (d) The total surface area of the arrays of ground mounted ASES on the property shall not exceed more than 15 percent of the net lot area.
- 4. Screening: Ground mounted ASES shall be screened from adjoining residential uses. The screening shall consist of coniferous and/or deciduous trees and shall be planted in such a manner that they screen the ASES from the view of adjoining property owners. Said trees shall be a minimum of six (6) feet tall at planting and shall be replaced within six (6) months of death. The landowner and operator shall maintain the vegetation in good condition. The Township Supervisors shall determine whether the vegetation is being maintained in good condition. If an adjoining property is used as a PSES then the screening requirement shall not apply in relation to the adjoining PSES property only.

- 5. Appropriate safety/warning signage concerning voltage shall be placed at ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the ASES shall be locked to prevent unauthorized access or entry.
- 6. Ground mounted ASES 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.
- 7. Noise levels shall not exceed fifty (50) decibels as measured from the property line.
- 8. Stormwater Requirements
  - (a) The following structural components of a solar energy system shall be considered impervious coverage for purposes of stormwater management and calculated as part of any impervious coverage limitations:
    - i. Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
    - ii. All mechanical equipment of the system including any structure for batteries or storage cells.
  - (b) The applicant shall submit a Stormwater Management Plan that demonstrates compliance with the Township's stormwater management requirements.
  - (c) Maintenance of vegetative cover required.
    - i. Vegetative cover shall not be cut to less than 4 inches in height.
    - ii. Vegetative cover shall be subject to the Metal Township Nuisance Ordinance and shall not be allowed to grow higher than 10 inches in height when measured from the surface of the ground (unless that vegetation is edible and being harvested on a regular basis).
    - iii. Vegetated areas will not be subject to chemical fertilization or herbicide/pesticides application, except for those applications necessary to establish the vegetative cover and in accordance with an approved Erosion and Sedimentation Control Plan.
  - (d) The applicant shall set forth a Vegetation Maintenance design that permits the upkeep of the vegetative cover.
    - i. The Vegetation Maintenance design shall include sufficient height of solar panels and sufficient distance between solar arrays (on the sides not adjacent to the cartway rights-

- of-way) to ensure that the established vegetation will be properly maintained without being subject to chemical fertilization or herbicide/pesticides application.
- ii. A Vegetation Maintenance design is permissible of it provides at least one of the following:
  - 1. Minimum height of seven feet from the base of the lowest level of any solar photovoltaic cell, module, or panel to the ground and minimum distance between solar arrays of one foot.
  - 2. Minimum height of two feet from the base of the lowest level of any solar photovoltaic cell, module, or panel to the ground and minimum distance between solar arrays of three feet.
- iii. If an applicant submit a Vegetation Maintenance design that does not meet the requirements of Section 3(B)(11)(ii)(1), above, that alternate Vegetation Maintenance design must be reviewed by Township Engineer and any additional authorities deemed appropriate by the Township and approved by the Township Engineer and any additional authorities as supporting the upkeep of the vegetation underneath the . The applicant shall pay all expenses associated with the review and approval of any alternate Vegetative Management design submission.
- (e) The individual solar modules within an array shall be arranged in a fashion that allows the passage of runoff between each module, minimizing the creation of concentrated runoff.
- (f) All panels must be placed on land with an existing slope or 10% or less.
- (g) The bottom vertical clearance of the solar array shall be of adequate minimum height to promote vegetative growth below the array.
- 9. Agrivoltaics are permitted when:
  - (a) Only shade-tolerant crops are proposed.
  - (b) Plowing is prohibited, no-till application is required.
  - (c) Cutting or mowing is limited to a height of no less than 4 inches.
  - (d) Application of chemical fertilization or herbicides/pesticides is limited to the agronomic needs to the crop(s).

# SECTION III: PRINCIPAL SOLAR ENERGY SYSTEM (PSES).

## A. Regulations Applicable to all PSES.

- 1. Plan Requirements.
  - (a) Ground mounted PSES require submission of a land development plan, including a Stormwater Management Plan, if the solar project area is greater than 5,000 square feet. A Planning and Design Standards report per the Township Subdivision and Land Development Ordinance shall be provided.
  - (b) Roof mounted PSES do not require submission of a land development plan.
- 2. Exceptions: PSES constructed prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modifications to an existing PSES, whether or not existing prior to the effective date of this Ordinance that materially alters the PSES, shall require approval under this Ordinance. Routine maintenance or like-kind replacements do not require a permit.

#### 3. Permit Requirements

- (a) PSES shall comply with the Metal Township Subdivision and Land Development Ordinance, including the submission and approval of a Land Development Plan. The installation of PSES shall be in compliance with all applicable permit requirements, codes, ordinances, resolutions, and regulations.
- (b) Land Use Permit applications shall document compliance with this Ordinance and shall be accompanied by drawings showing the location of the system on the building or property, including property lines. Permits must be kept on the premises where the PSES is constructed.
- (c) 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 operating condition.
- 4. No trees or other landscaping otherwise required by the Township ordinances or attached as a condition of approval of any plan, application, or permit may be removed for the installation or operation of a PSES.
- 5. 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 respond to the public's inquiries and complaints.

#### 6. Decommissioning

- (a) The PSES owner and/or operator is required to notify the Township immediately upon cessation or abandonment of the operation. The PSES shall be presumed to be discontinued or abandoned if no electricity is generated by such system for a period of six (6) continuous months. If the Township has cause to believe the PSES has been discontinued or abandoned, the Township shall provide notice to the owner and/or operator. The owner and/or operator shall have ninety (90) days to respond and demonstrate that the system is operational or provide reasonable cause for discontinued operations and the proposed remedy for returning the system to operation.
- (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 the established timeframes, the Township may complete the decommissioning at the owner's expense, first by drawing on the financial security described in subsection c. below, and then by placing a lien on the property, including the resale or scrap value of the components PSES, if any. or for any additional costs in excess of any financial security. Access roads and landscaping may remain in place if so desired by the property owner and such desire is expressed in writing to the Township.
- (c) Unless otherwise superseded by Federal or State requirements, at the time of issuance of the Land Use Permit for the construction of the PSES, the owner shall provide financial security in form and amount acceptable to the Township to secure the expense of dismantling and removing said PSES and restoration of the land to its original condition, including forestry plantings of the same type/variety and density as the original. The amount of said financial security shall be determined by the Township Engineer. All documentation concerning such financial security shall be subject to the review and approval of the Township Solicitor. The PSES Developer shall, at the time of application, provide the Township with an estimate of the cost of performing the decommissioning activities required herein, prepared by an engineer licensed in the Commonwealth of Pennsylvania, together with an administrative and inflation factor of 25% to account for the cost of obtaining permits to complete said activities. The estimate shall not include an estimated salvage and resale value. The decommissioning cost estimate formula shall be: Gross Cost of decommissioning activities + Administrative Factor of 25% = the decommissioning cost estimate. The Township Engineer shall then review said estimate and recommend for approval to the Board of Supervisors the final amount of financial security taking into account said estimate and other factors. The PSES Developer/ Owner shall be responsible for administrative, legal, and engineering costs incurred by the Township for such review. In addition, five (5) years after the date of the initial deposit of said financial security, and every five (5) years thereafter, the Township Engineer shall review the financial security to determine

if said security needs to be increased or decreased. If a change in the amount of the financial security needs to be made, the owner/operator shall provide financial security in the amount required within thirty (30) days of the approval of the updated decommissioning security estimate by the Township.

- (d) At no time shall the financial security be of an amount less than \$500,000.00.
- (e) The decommissioning security may be in the form of cash or irrevocable letter of credit or restrictive or escrow account of a Federal or Commonwealth chartered lending institution.
- (f) Prior to approval of any plan or permit for a PSES, the PSES Developer shall enter into an Agreement with the Township outlining the responsibility of the parties under this Agreement as to the Decommissioning of the PSES.

#### 7. Environmental Protection

- (a) All PSES solar project area must be set back a minimum distance of 25 feet from any area designated as a wetland, a 100-year FEMA FIRM floodplain, or an area containing 15% slope or greater.
- (b) All PSES solar project areas shall be set back a minimum distance of 100 feet from a property listed on, or eligible for listing, on the National Register of Historic Places as designated by the State Historic Preservation Office.
- (c) The solar project area shall be located on no more than 25% of the total Class I and Class II soils within the property boundaries, and in no case shall the solar project area occupy more than 20 total acres of Class I and Class II soils within each affected property. The undeveloped portion of Class I and Class II soils shall be designed for agricultural use and adequate for maneuverability of typical farm equipment. Soils shall be as identified by the USDA NRCS Web Soil Mapper.
- 8. The layout, design, installation and ongoing maintenance 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 Metal Township, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application.
- 9. Upon completion of installation, the Principal Solar Energy System shall be maintained in good working order in accordance with standards of the Metal Township codes under which the Principal

- Solar Energy System was constructed. Failure of the property owner to maintain the solar energy system in good working order is grounds for appropriate enforcement action by the Township in accordance with applicable ordinances.
- 10. Principal Solar Energy System installers must certify they are listed as a certified installer on DEP's approved solar installer list, or that they meet the criteria to be a DEP approved installer by meeting or exceeding one of the following requirements:
  - (a) Certification by the North American Board of Certified Energy Practitioners (NABCEP).
  - (b) Completion of an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited Photovoltaic (PV) training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
- 11. All on-site utilities, transmission lines, and plumbing shall be placed underground. All underground wiring and conduit shall be installed to a minimum depth of 3 feet.
- 12. The owner of the PSES shall provide Metal Township written confirmation that the public utility company to which the Principal Solar Energy System will be connected has been informed of the owner's intent to install a grid-connected system and approved of such connection. Off-grid systems shall be exempt from this requirement.
- 13. No portion of the Principal Solar Energy System 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 Principal Solar Energy System provided they comply with the prevailing sign ordinances, resolutions, or regulations.

# 14. Glare

- (a) All Principal Solar Energy Systems shall be placed such that concentrated solar radiation or glare does not project onto nearby structures or roadways. Exterior surfaces shall have a non-reflective finish.
- (b) The applicant has the burden of proving that any glare produced does not have significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

#### 15. Solar Easements

(a) An owner of a PSES may enter into solar easements with surrounding property owners. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements. Copies of all existing or proposed solar easements shall be submitted to the Township with the Land Use Permit application for the PSES. Copies

- of any subsequent solar easements shall be submitted to the Township within thirty (30) days of execution of that easement.
- (b) Any such easements shall be appurtenant; shall run with the land benefited and burdened; and shall be defined and limited by conditions stated in the instrument of conveyance. Instruments creating solar easements shall include, but not be limited to:
  - i. A description of the dimensions of the easement including vertical and horizontal angles measured in the degrees or the hours of the day, on specified dates, during which direct sunlight to a specified surface or structural design feature may not be obstructed;
  - ii. Restrictions on the placement of vegetation, structures and other objects which may impair or obstruct the passage of sunlight through the easement;
  - iii. Terms and conditions, if any, under which the easement may be revised or terminated;
  - iv. Compensation for the owner of the real property subject to the solar easement for maintaining the easement and for the owner of the real property benefiting from the solar easement in the event of interference with the easement.
- (c) If required, a Principal Solar Energy System owner and/or operator must obtain any solar easements necessary to guarantee unobstructed solar access by separate civil agreement(s) with adjacent property owner(s).
- 16. Prior to the issuance of a Land Use Permit, applicants must acknowledge in writing (and this acknowledgement shall be submitted to the Township and placed on any required subdivision and/or land development plans) that the issuance of said permit for a Principal Solar Energy System 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 the development of adjoining or other property or the growth of any trees or vegetation on such property.
  - (b) The right to prohibit the development on or growth of any trees or vegetation on such property.

#### B. Ground Mounted PSES

- 1. Minimum lot size: The PSES solar project area shall be not fewer than 20 acres.
- 2. Setbacks: The PSES solar project area yard setbacks shall be one hundred (100') feet from all property lines (front, rear, and side yards), and two hundred (200') feet from any existing offsite

principal structure. (Please note that for the purposes of this Ordinance structure is defined as follows: "The principal or main dwelling on a lot, parcel or tract of land used for human habitation and/or assembly.") However, if an adjoining property is used as a PSES with its solar project area also adjoining then the setback requirement shall not apply in relation to the adjoining PSES property only.

3. Height: Ground mounted PSES shall not exceed 20 feet in height at maximum tilt.

#### 4. Coverage

- (a) The area beneath the ground mounted PSES that contains vegetative cover is considered pervious coverage. However, use of impervious construction materials under the system could cause the area to be considered impervious and subject to the impervious surfaces limitations.
- (b) Gravel shall be considered an impervious cover.
- (c) The applicant shall submit a Storm Water Management Plan that demonstrates compliance with the Metal Township Stormwater Management Ordinance.
- 5. Ground mounted PSES and buildings located on PSES property shall be screened from view with a continuous (with the exception of gates at road frontage) vegetation buffer shall be installed between the property line and the solar project perimeter fence. Vegetative screening shall be required from any adjoining dwelling and from any adjoining residential, commercial, institutional, quasi-public or public use. Adjoining dwellings or uses shall also include those opposite to and separated from the PSES by a road. The screening shall consist of two offset rows of coniferous/evergreen trees of mixed varieties. Deciduous trees may be added in addition to conifers after the shielding requirement is met. Conifers shall be a six (6) feet minimum height at planting, consisting of species capable of growing to exceed height of panel installation. A landscape plan prepared by a licensed landscape architect, arborist, or someone knowledgeable and experienced in landscape design shall be submitted with soil requirements for successful planting, and spacing between plants to be such that evergreens are expected to survive and will shield the PSES from view year-round. The vegetation shall be maintained in good condition by the owner/operator. The landscape plan shall include a maintenance plan and a litter and weed control plan along with a one year contractor's warranty for all plantings. The Township Supervisors shall determine whether the vegetation is being maintained in good condition. Dead plants and trees must be removed and replaced within six (6) months of being notified by Metal Township.
- 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.

## 7. Security

- (a) All ground-mounted PSES shall be completely enclosed by a minimum eight (8) foot high-with a self-locking gate. Fence details shall be provided as part of any land development plan. Fences shall be permanently maintained in good condition and repaired or replaced whenever necessary.
- (b) A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the PSES informing individuals of potential voltage hazards.
- (c) A sign indicating 24-hour telephone contact to responsible party to report and react in a timely fashion to issues and/or emergencies shall be included. Instructions shall be provided to local fire and emergency personnel on how to safely enter and deactivate systems in daylight and night. Applicant will provide a means of immediate, 24-hour access to the site for fire and emergency personnel. (Knox boxes or equivalent).

#### 8. Access

- (d) At a minimum, a 25' wide access road with a minimum right-of-way of 50 feet must be provided from a state or township roadway into the site in accordance with applicable State and Township requirements. This access road must be improved with a base course that shall consist of 8 inches of 2-A stone. The base course shall be measured after it has been compacted with a roller of not less than 10 tons in weight.
- (e) At a minimum, a 20' 16 foot wide cartway and a minimum 25 foot cartway right-of-way shall be provided between the solar arrays to allow access for maintenance and emergency vehicles, including fire apparatus and emergency vehicles. Cartway right-of-way width is, at minimum, the distance between the bottom edge of a solar panel to the top edge of the solar panel directly across from it. This cartway must be improved with a base course that shall consist of 8 inches of 2-A stone. The base course shall be measured after it has been compacted with a roller of not less than 10 tons in weight.
- (f) Solar panels shall not extend into the cartway right-of-way.
- (g) Access to the PSES shall comply with the access requirements in the Metal Township Subdivision and Land Development Ordinance. Highway Occupancy Permits shall be required from the State or Township for any proposed driveway access and/or utility road crossing.
- 9. PSES may have no dusk to dawn automatic or artificial lighting of any type shall be allowed except to the extent required for safety or per requirements of any applicable federal, state, or local

authority. Any lighting required for maintenance, safety, or emergency must be switched, and only activated when qualified personnel are present. All lighting from any component of the PSES shall be shielded and downcast such that light does not spill skyward or onto any adjacent parcel or public roadway.

- 10. If a ground mounted PSES is removed, any earth disturbance resulting from the removal must be graded and reseeded.
- 11. Noise levels shall not exceed fifty (50) decibels as measured from the property line.
- 12. Outdoor storage. No storage of materials or equipment shall be allowed outside on site after the initial construction period is completed.

#### 13. Stormwater Requirements

- (a) The following structural components of a solar energy system shall be considered impervious coverage for purposes of stormwater management and calculated as part of the impervious coverage limitations for the underlying zoning district:
  - i. Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
  - ii. All mechanical equipment of the system including any structure for batteries or storage cells.
- (b) The applicant shall submit a Stormwater Management Plan that demonstrates compliance with the Township's stormwater management requirements.
- (c) Maintenance of vegetative cover required.
  - i. Vegetative cover shall not be cut to less than 4 inches in height.
  - ii. Vegetative cover shall be subject to the Metal Township Nuisance Ordinance and shall not be allowed to grow higher than 10 inches in height when measured from the surface of the ground (unless that vegetation is edible and being harvested on a regular basis).
  - iii. Vegetated areas will not be subject to chemical fertilization or herbicide/pesticides application, except for those applications necessary to establish the vegetative cover and in accordance with an approved Erosion and Sedimentation Control Plan.
- (d) The applicant shall set forth a Vegetation Maintenance design that permits the upkeep of the vegetative cover.

- i. The Vegetation Maintenance design shall include sufficient height of solar panels and sufficient distance between solar arrays (on the sides not adjacent to the cartway rights-ofway) to ensure that the established vegetation will be properly maintained without being subject to chemical fertilization or herbicide/pesticides application.
- ii. A Vegetation Maintenance design is permissible of it provides at least one of the following:
  - 1. Minimum height of seven feet from the base of the lowest level of any solar photovoltaic cell, module, or panel to the ground and minimum distance between solar arrays of one foot.
  - 2. Minimum height of two feet from the base of the lowest level of any solar photovoltaic cell, module, or panel to the ground and minimum distance between solar arrays of three feet.
- iii. If an applicant submit a Vegetation Maintenance design that does not meet the requirements of Section 3(B)(11)(ii)(1), above, that alternate Vegetation Maintenance design must be reviewed by Township Engineer and any additional authorities deemed appropriate by the Township and approved by the Township Engineer and any additional authorities as supporting the upkeep of the vegetation underneath the . The applicant shall pay all expenses associated with the review and approval of any alternate Vegetative Management design submission.
- (e) The individual solar modules within an array shall be arranged in a fashion that allows the passage of runoff between each module, minimizing the creation of concentrated runoff.
- (f) All panels must be placed on land with an existing slope or 10% or less.
  - (g) The bottom vertical clearance of the solar array shall be of adequate minimum height to promote vegetative growth below the array.
- 14. Agrivoltaics are permitted when:
  - (a) Only shade-tolerant crops are proposed.
  - (b) Plowing is prohibited, no-till application is required.
  - (c) Cutting or mowing is limited to a height of no less than 4 inches.
  - (d) Application of chemical fertilization or herbicides/pesticides is limited to the agronomic needs to the crop(s).

#### C. Roof and Wall Mounted PSES

- 1. For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the Uniform Construction Code and all building codes adopted by the Township, and 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 building shall be subject to the maximum height ordinances, resolutions, or regulation of the underlying district.
- 3. Wall mounted PSES shall comply with the setbacks for principal, structures in the underlying districts.
- 4. Solar panels shall not extend beyond any portion of the roof edge.

# SECTION IV: LIABILITY INSURANCE FOR PSES.

Any owner/operator of a PSES shall submit to Township proof of current public liability insurance, including renewals prior to expiration, (including personal injury liability) for at least \$1,000,000 per individual and at least \$2,000,000 per occurrence to cover any loss that may be incurred for or on account of any matter, cause or thing arising out of the PSES. Proof of insurance shall be a Certificate of Insurance and shall be provided to the Township at the time of commencement of construction and annually every year thereafter.

#### SECTION V: PENALTIES AND ENFORCEMENT.

- A. This Ordinance shall be enforced as summary criminal offenses in accordance with Section 1601 of the Second Class Township Code, as amended, regarding regulations for health, public safety, building, property maintenance, housing or fire. The penalty to be imposed shall be a maximum fine of \$1,000 or imprisonment for a maximum period of 90 days, or both. Each day that a violation exists and is continued shall constitute a separate offense.
- B. The Township shall also be entitled to recover from any owner all costs or fees (the "costs") arising out of or related to the enforcement of this Ordinance. Such costs may also include those to remedy violations of this Ordinance and abate nuisances. The costs shall include, but not be limited to, engineer fees, attorney fees and staff/employee time. The costs may be collected as a Municipal Claim under applicable law against the property. The Township may also enforce this Ordinance through an action in equity brought in the Franklin County Court of Common Pleas.

#### **SECTION VI: WAIVERS.**

- A. Where, owing to special conditions, a literal enforcement of the provisions of this Ordinance will result in unreasonable hardship, the Board of Supervisors may make such reasonable waivers thereto which are in accordance with modern and evolving principles and which are not contrary to the public interest and so that the spirit of the Ordinance shall be observed and substantial justice done.
- B. Application letter, along with all supporting data, for any waiver shall be submitted to the Township in writing by the applicant. The application letter shall state fully the grounds and all the relevant facts regarding the situation. The Supervisors may require additional details as part of their review.
- C. The Board of Supervisors shall make their decision, record the action and grounds for granting or denying the waiver in its minutes.

#### SECTION VII: REPEALER.

All provisions of other Metal Township Ordinances are hereby revised and amended, as necessary and appropriate, in order to insure and confirm consistency thereof with the provisions of the present Ordinance. Any Ordinance or Resolution, or any portion of any Ordinance or Resolution, which is inconsistent with the contents of the present Ordinance shall be, and the same is hereby, repealed insofar as the same is affected by or inconsistent with the provisions of the present Ordinance.

#### SECTION VIII: SEVERABILITY.

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction, such portion shall be deemed to be a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the present Ordinance.

#### SECTION IX: EFFECTIVE DATE.

This Ordinance shall become effective five (5) days from the date of enactment thereof.

APPROVED AND ENACTED BY THE METAL TOWNSHIP BOARD OF SUPERVISORS ON THIS the <u>25</u> day of <u>April</u>, 2024.

ATTEST:

Anna H. Swailes (SEAL)

Secretary, Metal Township Board of Supervisors

BOARD OF SUPERVISORS OF METAL TOWNSHIP

DV.

Dale L. Hall, Chairperson

BY:

Henrico J. Mi

DV.

David A. Leab

#### CERTIFICATION

As Secretary of the Metal Township Board of Supervisors, the undersigned hereby certifies that the foregoing Ordinance was adopted by the Metal Township Board of Supervisors at its regular meeting held on Lipsil 25, 2024, which meeting was called and at which a quorum was present and acting throughout, and that said Ordinance has not been revoked or amended.

Date: Caril 25 , 2024

Anna H. Swailes

Secretary, Metal Township Board of Supervisors