

THORNHURST TOWNSHIP
ZONING ORDINANCE AMENDMENT

ORDINANCE 1 of 2022

AN ORDINANCE AMENDING THE THORNHURST TOWNSHIP ZONING ORDINANCE, ENACTED JULY 19, 1995, TO ADD ACCESSORY AND CONDITIONAL LAND USES AND REGULATIONS AND DEFINITIONS PERTAINING TO SOLAR PANELS AND SOLAR ENERGY FACILITIES

BE IT ORDAINED AND ENACTED by the Board of Supervisors of Thornhurst Township, Lackawanna County, Pennsylvania, that the Thornhurst Township Zoning Ordinance enacted July 19, 1995, is hereby amended as follows:

Part 1

General Provisions

27-105. **Statement of Community Development Objectives**

Add a new subsection as follows:

2. M. To permit the use of alternative, renewable energy facilities by providing for their planning, installation and construction while incorporating regulations intended to protect the public health, welfare and safety of the community.

Part 2

Definitions

27-201. **Applicable Definitions**

Add the following definitions:

Solar Energy System Facilities

(1) Accessory Solar Panels

An accessory use on a parcel of land used to capture solar energy, convert it to electrical energy or thermal power and supply electrical or thermal power primarily for on-site use. Accessory Solar Panels consist of one or more free-standing ground-, or roof- or wall-mounted solar arrays or modules, or solar related equipment and is intended to primarily reduce on-site consumption of utility power or fuels.

(2) Glare

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

(3) Landowner

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, she or it is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land.

(4) Operator

A person responsible for the day-to-day operation and maintenance of a solar energy facility.

(5) Owner

A person having a legal or equitable interest in a solar energy facility.

(6) Person

Any natural person, individual, partnership, firm, association, corporation, or other entity.

(7) Solar Array

A grouping of multiple solar modules with the purpose of harvesting solar energy.

(8) Solar Cell

The smallest basic solar electric device which generates electricity when exposed to light.

(9) Solar Easement

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 facilities.

(10) Solar Energy

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

(11) Solar Energy Facility (SEF), Principal

An area of land or other area used for a solar collection facility or 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 facilities consist of one or more free-standing ground-, or roof- or wall-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.

(12) Solar Module

A grouping of solar cells with the purpose of harvesting solar energy.

(13) Solar Panel

That part or portion of a principal solar energy facility 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.

(14) 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.

Part 4

Basic District Regulations

Schedule 27-I

Regulations Governing the Use of Land

Add the following to Use Class, Conditional Uses (c), to the R-C Zoning District

Solar Energy Facilities

27-403. Use Classes in Zoning District:

Add the following to Subsection H. Use Class-7 Customary Accessory Uses:

(2) (j) Accessory Solar Panels

1) Compliance with Industry Standards

The Accessory Solar Panel 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), or other similar certifying organizations, and shall comply with the PA Uniform Construction Code, regulations adopted by the Pennsylvania Department of Labor and Industry, 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 permit application.

2) Installers

Accessory Solar Panel installers must demonstrate they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) 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) Is certified by the North American Board of Certified Energy Practitioners (NABCEP) for PV installation.
- b) Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited PV training program or a PV manufacturer's training program and successfully installed a minimum of three PV systems.
- c) For residential applications, a registered home improvement contractor with the Attorney General's Office.

3) Maintain in Good Working Order

Upon completion of installation, the Accessory Solar Panel shall be maintained in good working order in accordance with manufacturer's standards of and any other codes under which the Accessory Solar Panel was constructed. Failure of the owner to maintain the Accessory Solar Panel in good working order is grounds for enforcement action by the Zoning Officer under Section 27-609 of the Zoning Ordinance.

4) Underground Requirements

All on-site utility, transmission, and plumbing lines shall be placed underground.

5) Signage

The display of advertising is prohibited except for a nameplate and identification sign under Section 27-506 of the Zoning Ordinance.

6) Glare

- a) All Accessory Solar Panels shall be coated with an anti-reflective film and shall be placed such that concentrated solar radiation or glare does not project onto nearby properties, structures/buildings or roadways.
- b) The applicant has the burden of proving that any glare produced does not have a significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

7) Solar Easement

If a solar easement, intended to guarantee unobstructed solar access, is desired by the applicant, owner or landowner for an Accessory Solar Panel, such matter shall be carried out as a private agreement among the parties of which the Township shall not be a party. The Township shall also not be responsible for ensuring the maintenance or enforcement of any solar easement.

8) Roof Mounted and Wall Mounted Accessory Solar Panels

- a) Location. A roof mounted or wall mounted Accessory Solar Panel may be located on a principal or accessory building in all zoning districts.

b) Setbacks.

- (i) Wall mounted Accessory Solar Panels shall comply with the setbacks for an accessory structure under Section 27-503 of the Zoning Ordinance. This requirement includes the actual solar panel and all solar-related equipment.
- (ii) Roof mounted Accessory Solar Panels shall not extend beyond any portion of the roof edge. This requirement includes the actual solar panel and all solar-related equipment.

c) Height.

Accessory Solar Panels mounted on roofs or walls of any building shall be subject to the maximum height requirement specified for a principal building within the zoning district in which it is located.

d) Code Compliance.

For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the PA Uniform Construction Code and that the roof or wall can hold the load imposed on the structure. Applications for roof mounted Accessory Solar Panels shall be accompanied by engineer stamped plans that demonstrate the structural sufficiency of the roof to hold the weight of the Accessory Solar Panel.

9) Ground Mounted Accessory Solar Panels

a) Location. Ground mounted Accessory Solar Panels are permitted in all zoning districts.

b) Setbacks.

- (i) The minimum yard setbacks from side and rear property lines shall comply with the required setbacks for a principal structure setback of the zoning district in which it is located. This requirement includes the actual solar panel and all solar-related equipment.
- (ii) Ground mounted Accessory Solar Panels are prohibited in front yards, between the principal building and the public street, excluding front yard locations that are located not less than 200 feet from the front property line.

c) Height.

Freestanding ground mounted Accessory Solar Panels shall not exceed twelve (12) feet in height above the ground elevation surrounding the panels.

d) Maximum Impervious Cover.

- (i) The surface area of the arrays of a ground mounted Accessory Solar Panel, regardless of the mounted angle of any solar panels, shall be considered impervious and calculated in the percentage of

impervious cover. Accessory Solar Panels shall not exceed the maximum impervious lot coverage for the zoning district in which it is located.

- (ii) If applicable, the applicant shall submit a Storm Water Management Plan that demonstrates compliance with the Township storm water management regulations.

e) Screening.

Ground mounted Accessory Solar Panels when located less than fifty (50) feet from a property line shall be screened from any adjacent property that is used for residential purposes. The screening shall be in accordance with Section 27-509 1. A. of the Zoning Ordinance

f) Safety/Warning Signage.

Appropriate safety/warning signage concerning voltage shall be affixed to ground mounted electrical devices, equipment, and structures. All electrical control devices associated with the Accessory Solar Panel shall be locked to prevent unauthorized access or entry.

g) Location Restrictions.

Ground-mounted Accessory Solar Panels 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 location on the property that would alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

10) Decommissioning

- a) Each accessory solar panel 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 the system.
- b) The accessory solar panel(s) shall be presumed to be discontinued or abandoned if no electricity is generated by such panel(s) for a period of twelve (12) continuous months.
- c) The accessory solar panel(s) owner and/or operator shall, at the request of the Township, provide information concerning the amount of energy generated by the solar panel(s) in the preceding twelve (12) month period from the date of the request.

11) Zoning Permit Requirements

- a) The zoning permit application shall document compliance with this Ordinance and shall be accompanied by drawings showing the location of the accessory solar panel system on the building or property, including property lines. The applicant shall also be required to secure all applicable building permits required by the PA Uniform Construction

Code. All permits must be kept on the premises where the accessory solar panel(s) are constructed.

- b) A new zoning permit shall be required if an accessory solar system, whether originally permitted under this Ordinance, or pre-existed prior to this Ordinance's effective date, is moved, or otherwise altered, either intentionally or by natural forces, in a manner that causes the system to not be in compliance with this Ordinance.
- c) The accessory solar system must be properly maintained and kept free from all hazards, including but not limited to, faulty wiring, loose fastenings, existing in an unsafe condition or be detrimental to the public health, safety, or general welfare. In the event of a violation, the zoning officer shall give written notice specifying the violation to the owner/operator of the system and to conform or remove the system.
- d) Prior to the issuance of a zoning permit, applicants must acknowledge in writing that the issuing of said permit for an accessory solar system shall not, and does not, create in the property owner/operator, its, his, or her successors and assigns in title or, create in the property itself:
 - [1] the right to remain free of shadows and/or obstructions to the solar energy caused by development of adjoining or other properties or the growth of any trees or vegetation on such properties; or
 - [2] the right to prohibit the development of or growth of any trees or vegetation on such properties.

Add the following to 4. Conditional Uses:

E. *Use Class 15-Solar Energy Facilities (SEF)*. In addition to all other applicable standards in this Chapter, the following regulations shall apply to solar energy facilities:

(1) *Compliance with Industry Standards*

The SEF 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), or other similar certifying organizations, and shall comply with the PA Uniform Construction Code, regulations adopted by the Pennsylvania Department of Labor and Industry, 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 permit application.

(2) *Installers*

SEF installers must demonstrate they are listed as a certified installer on the PA Department of Environmental Protection's (DEP) 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) Is certified by the North American Board of Certified Energy (NABCEP) for solar thermal installation.
- (b) Has completed an Interstate Renewable Energy Council (IREC) Institute for Sustainable Power Quality (ISPQ) accredited solar thermal training program or a solar collector's manufacturer's training program and successfully installed a minimum of three solar thermal systems.

(3) *Maintain Good Working Order*

Upon completion of installation, the SEF shall be maintained in good working order in accordance with manufacturer's standards and any other codes under which the SEF was constructed. Failure of the owner to maintain the SEF in good working order is grounds for enforcement action by the Zoning Officer under Section 27-609 of the Zoning Ordinance.

(4) *Underground Requirements*

All on-site transmission and plumbing lines shall be placed underground.

(5) *Utility Notification*

The owner of an SEF shall provide the Township with written confirmation that the public utility company to which the SEF will be connected has been informed of the customer's intent to install a grid connected system and approved of such connection.

(6) *Signage*

No portion of the SEF 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 SEF provided it complies with the nameplate and identification sign requirements of Section 27-506 of the Zoning Ordinance.

(7) *Glare*

- (a) All SEFs shall be coated with an anti-reflective film and shall be placed such that concentrated solar radiation or glare does not project onto nearby properties, structures/buildings, and roadways.
- (b) The applicant has the burden of proving that any glare produced does not have a significant adverse impact on neighboring or adjacent uses either through siting or mitigation.

(8) *Lighting*

A lighting plan shall be required as part of the land development approval process. Lighting shall not adversely affect adjoining properties and shall only be designed to meet any federal or state safety requirements. It shall also be developed in accordance with International Dark-Sky Association best practices.

(9) *Noise Study*

A noise study shall be performed and included with the zoning permit application. The noise study shall be performed by an independent noise study expert and paid for by the applicant. Noise from an SEF shall not exceed 45 dBA, as measured at the property line.

(10) *Screening*

Ground-mounted Solar Panels when located less than 150 feet from a property line shall be screened from any adjacent property that is used for residential purposes. The screening shall be in accordance with Section 27-509 1. A. of the Zoning Ordinance. In addition, no trees or other landscaping required as a condition of approval may be removed during the installation or operation of an SEF. The Township shall consider any combination of existing vegetation, topography, walls, fences, or other features if they achieve the same degree of the required screening.

(11) *Fencing*

Fencing may be required around the site or around the structures unless the design of the structures adequately provides for safety. Any required fencing shall take wildlife corridors into consideration.

(12) *Access and Required Parking*

Access to SEFs shall be from public streets or easements to a public street. The easement shall be a minimum of twenty (20) feet in width and shall be improved to a width of at least ten (10) feet with a dust-free, all-weather surface for its entire length. Adequate off-street parking shall be required for maintenance workers.

(13) *Communications Interference*

The applicant shall document that telecommunication, satellite, cellular, or similar signals for nearby properties will not be disturbed or diminished. This may be accomplished by remedial measures instituted by the SEF developer.

(14) *Contact Information*

The SEF owner and/or operator shall provide current contact information to the Township which includes a phone number and identifies a responsible person for the Township or public to contact regarding emergencies, inquiries, and complaints for the duration of the project. The contact information shall be conspicuously posted on the property so that a person would not believe they were trespassing while viewing it.

(15) *Emergency Preparedness Plan*

The owner and/or operator shall furnish a written emergency preparedness plan outlining the procedures on how emergencies will be handled. The plan shall include the way the owner and/or operator will coordinate with local emergency service providers in the event of an emergency.

(16) *Solar Easements*

Where a solar easement is proposed by the owner or landowner for an SEF, a written agreement in recordable form constituting a covenant running with the land shall be provided to the Township as part of the subdivision and/or land development. The Township shall not be a party to any agreement, nor an intended third-party beneficiary, and shall not be responsible for enforcement or maintenance of any solar easement.

(17) *Performance Standards*

The performance standards of this section shall regulate all SEFs as well as the performance standards of Section 27-402 1. and any applicable requirements of Section 27-510, Environmentally Sensitive Areas, of this Zoning Ordinance.

(18) *Subdivision and Land Development*

All SEFs shall constitute a subdivision and/or land development.

(19) *Decommissioning*

- (a) The SEF owner is required to notify the Township immediately upon cessation or abandonment of the use. The SEF shall be presumed to be discontinued or abandoned if no electricity is generated by the system for a continuous period of twelve (12) months.
- (b) The SEF owner shall then have six (6) months in which to dismantle and remove the SEF including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, transmission and plumbing lines, roads, foundations, and other associated facilities from the property. The owner shall also restore the land to its original pre-construction condition. If the owner fails to dismantle and/or remove the SEF and restore the land within the six-month period, the Township may, but shall not be required to, complete the decommissioning and land restoration at the owner's expense.
- (c) At the time of issuance of the zoning permit for the construction of the SEF, the owner shall provide proof of liability insurance and a financial security to the Township to secure the expense of dismantling and removing the SEF and restoration of the land to its original condition. The financial security shall be in the amount of 110% of the costs of decommissioning. The decommissioning funds shall be posted and maintain during the life of the project in the form of a performance bond, irrevocable letter of credit, or other financial form of security acceptable to the Township Board of Supervisors.
- (d) An independent and certified professional engineer shall be retained by the Township at the owner's cost to estimate the total cost of decommissioning without regard to salvage value of the equipment, and the cost of decommissioning net salvage value of the equipment. Thereafter, the owner shall retain an engineer to provide the Township with cost estimates of

decommissioning after the first year of operation and every fifth year thereafter.

(20) *Ground Mounted Solar Energy Facilities*

Ground mounted SEFs shall have a:

- (a) minimum lot size of five (5) acres.
- (b) minimum setback at all property lines of one hundred (100) feet.
- (c) maximum height of twelve (12) feet.
- (d) maximum lot coverage for the zoning district in which it is located. The surface area of the arrays of a ground mounted SEF, regardless of the mounted angle of any solar panels, shall be considered part of the impervious lot coverage area.
- (e) prepared stormwater management plan in accordance with Township Ordinances and PA DEP Best Management Practices. This shall include the use of low maintenance and low growing vegetative surfaces that support native pollinators under the SEF.
- (f) prepared grading plan that minimizes to the best extent possible the disturbance or alteration of the existing topography on the site.

(21) *Zoning Permit Requirements*

- (a) The zoning permit application shall document compliance with this Ordinance and shall be accompanied by drawings showing the location of the SEF on the building or property, including property lines. The applicant shall also be required to secure all applicable building permits required by the PA Uniform Construction Code. All permits must be kept on the premises where the SEF is constructed.
- (b) A new zoning permit shall be required if an SEF, whether originally permitted under this Ordinance, or pre-existed prior to this Ordinance's effective date, is moved, or otherwise altered, either intentionally or by natural forces, in a manner that causes the system to not comply with this Ordinance.
- (c) The SEF must be properly maintained and kept free from all hazards, including by not limited to, faulty wiring, loose fastenings, existing in an unsafe condition or be detrimental to the public health, safety, or general welfare. In the event of a violation, the zoning officer shall give written notice specifying the violation to the owner/operator of the system and to conform or remove the system.
- (d) Prior to the issuance of a zoning permit, applicants must acknowledge in writing that the issuing of said permit for an SEF shall not, and does not, create in the property owner/operator, its, his, or her successors and assigns in title or, create in the property itself:

- [1] the right to remain free of shadows and/or obstructions to the solar energy caused by development of adjoining or other properties or the growth of any trees or vegetation on such properties; or

[2] the right to prohibit the development of or growth of any trees or vegetation on such properties.

The Public Hearing for this Ordinance was held on 12/5/22.

This Ordinance, amending the Thornhurst Township Zoning Ordinance, enacted July 19, 1995, is hereby Ordained and Enacted by the Board of Supervisors of Thornhurst Township, Lackawanna County, Pennsylvania, at a duly convened meeting of the Board of Supervisors of Thornhurst Township this 8th day of December, 2022, to become effective immediately.

TOWNSHIP OF THORNHURST

BY: *Alan P. Evans*
Chairman

W. J. [unclear]
Supervisor

Supervisor

ATTEST:
Kim O'Carroll
Secretary