### **ORDINANCE NO. 0822001**

AN ORDINANCE DECLARING THE PROPER INSTALLATION AND PLACEMENT OF SOLAR RELATED EQUIPMENT IS NECESSARY FOR THE HEALTH AND SAFETY OF THE RESIDENTS OF THE CITY AND ORDAINING OTHER PROVISIONS RELATED TO THE SUBJECT MATTER HEREOF.

WHEREAS, it has come to the attention of the City Council of the City of Penelope that the installation and placement of solar related equipment can be dangerous and constitute a hazard to health, life and property; and

WHEREAS, the City Council of the City of Penelope finds it to be in the best interests of the public safety, health and general welfare to regulate solar related equipment within the City, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PENELOPE, TEXAS:

**SECTION 1.** This Ordinance is hereby referenced as the "Penelope Solar Related Equipment Ordinance."

#### **SECTION 2. Purpose**

(A) The Purpose of this ordinance is to set forth standards that will assist industry providers and property owners in the determination of the proper installation and placement of solar related equipment with the understanding that solar capabilities may not be possible or feasible on all properties within the City of Penelope.

# **SECTION 3. Definitions**

- (A) For purposes of this division the following words and terms as used herein are defined to mean the following:
  - (1) Accessory Solar Energy System (ASES) shall mean 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 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.
  - (2) Building-Integrated Photovoltaic Systems (BIPV) shall mean a solar energy device that consists of integrating solar photovoltaic modules into the building envelope, where solar panels themselves act as building material (e.g., roof shingles) or structural element (e.g., façade).

- (3) Ground-mounted Solar Energy Devices shall mean a solar energy device where an array is mounted onto the ground.
- (4) Glare shall mean the effect produced by light with an intensity sufficient to cause loss in visual performance and visibility.
- (5) Photovoltaic System (PV) shall mean the total components and subsystem that, in combination, convert solar energy into electric energy suitable for a connection to a utilization load.
- (6) Principal Solar Energy System (PSES) shall mean 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 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.
- (7) Solar easement shall mean 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.
- (8) Solar energy shall mean radiant energy (direct, diffuse and/or reflective) received from the sun at wavelengths suitable for conversion into thermal, mechanical, chemical, or electrical energy.
- (9) Solar Energy Device shall mean a system or series of mechanisms designed primarily to provide heating or cooling or to produce electrical or mechanical power by collecting and transferring solar-generated energy. The term includes a mechanical or chemical device that has the ability to store solar-generated energy for use in heating or cooling in the production of power.
- (10) Solar panel shall mean 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.
- (11) Solar related equipment shall mean 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, such as:
  - a. Solar array shall mean a grouping of multiple solar modules with purpose of harvesting solar energy.
  - b. Solar cell shall mean the smallest basic solar electric device which generates electricity when exposed to sunlight.

- c. Solar module shall mean a grouping of solar cells with the purpose of harvesting solar energy.
- (12) Utility-Scale Photovoltaic shall mean that the power from the solar application's primary use is to be sold for commercial gain, and not for offsetting electricity used by a facility.

### **SECTION 3. Applicability**

- (A) This ordinance applies to Solar Energy Devices to be installed and constructed after the effective date of the ordinance, and all applications for Solar Energy Devices on existing buildings or property. Solar Energy Devices constructed prior to the effective date of this ordinance shall not be required to meet the requirements of this ordinance. Any upgrades, modifications, or changes that materially alter the size or placement of an existing Solar Energy Device shall comply with the provisions of this ordinance.
- (B) This ordinance further prohibits Utility Scale Photovoltaic solar applications within the City limits of Penelope, Texas.

# SECTION 4. Accessory Solar Energy Systems (ASES)

- (A) The following regulations are applicable to all accessory solar energy systems:
  - (1) ASES shall be permitted as a use by right in all zoning districts.
  - (2) Exemptions:
    - a. ASES constructed prior to the effective date of this section shall not be required to meet the terms and conditions of this ordinance but must still adhere to and all regulations that were in place at the time they were constructed. Any physical modification to an existing ASES whether or not existing prior to the effective date of this section that materially alters the ASES shall require approval under this ordinance. Routine maintenance or like-kind replacements do not require a permit.
  - (3) All on-site utility feeder lines associated with SES from the array to the final utility connection shall be placed underground.
  - (4) The owner of an ASES shall provide the City written confirmation that the public utility company, to which the ASES will be connected, has been informed of the customer's intent to install a grid connected system and approved by the utility company of such connection. Off-grid systems shall be exempt from this requirement.
  - (5) The display of advertising is prohibited except for reasonable identification of the manufacturer of the system. The City shall be the sole determiner of what is reasonable.

#### **SECTION 5. Solar Easements**

- (A) Where a subdivision or land development involves the use of solar energy systems, solar easements may be provided. Said easements shall be in writing and shall be subject to the same conveyance and instrument recording requirements as other easements.
- (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 easement shall include but not be limited to:
  - (1) 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.
  - (2) Restrictions on the placement of vegetation, structures, and other objects which may impair or obstruct the passage of sunlight through the easement.
  - (3) Enumerate terms and conditions, if any, under which the easement may be revised or terminated.
  - (4) Explain the 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.
  - (5) If required, an ASES 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).
- (C) In lieu of an easement submitted pursuant to the previous section, prior to the issuance of a zoning/building permit, applicants must acknowledge in writing that the issuing of said permit for a solar energy system shall not and does not create in any other property owner, its, his, her or their successors and assigns in title or, create in the property itself:
  - (1) 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; or
  - (2) The right to prohibit the development on or growth of any trees or vegetation on any other property unless a solar easement is established according to the provisions of these regulations.

(A)The support structure for any ground mounted ASES shall be screened from all adjacent rights-of-way and property that is residentially zoned or used for residential purposes. Screening may consist of skirting, landscaping, privacy fence or other type of fence that meets the requirements of the zoning regulations. In the case that landscaping is used for screening of the support structure, evergreen trees shall be placed at intervals of no more than six feet on center.

### **SECTION 7. Use for advertising**

(A)No part of a solar energy system shall be used to display advertising, including signage, streamers, pennants, spinners, reflectors, ribbons, tinsel, balloons, flags, banners or similar materials.

### SECTION 8. Roof mounted and wall mounted accessory solar energy systems

- (A)A roof mounted or wall mounted ASES may be located on a principal or accessory building.
- (B) Roof mounted ASES may exceed the maximum building height specified for principal or accessory buildings by no more than three feet.
- (C) No part of the solar array or the supporting structure shall extend beyond any portion of the roof edge.
- (D) Roof mounted solar panels on residential structures that are located on roof surfaces visible from the right-of-way of any street contiguous to the property shall be installed parallel to the respective roof surface.
- (E) For roof and wall mounted systems, the applicant shall provide evidence that the plans comply with the adopted building code of the City of Penelope and that the roof or wall is capable of holding the load imposed on the structure.
- (F) A setback from all roof edges, as defined by the 2012 International Fire Code (IFC) or any code adopted thereafter, shall be provided for roof mounted solar panels to ensure that firefighters may access the roof in a quick and safe manner and may penetrate the roof to create ventilation if necessary.

#### SECTION 9. Ground mounted accessory solar energy systems

- (A)Generally, ground mounted ASES will be required to adhere to the requirements as stated below.
- (B) Setbacks.
  - (1) The minimum yard setbacks from side and rear property lines shall be ten (10) feet.

- (2) A ground mounted ASES shall not be located in any front yard.
- (C) Height.
- (1) Freestanding ground mounted ASES shall not exceed the maximum height of ten (10) feet.
- (D) Ground-mounted ASES shall not be placed within any legal easement or right-ofway 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 or natural storm water conveyance system.

# SECTION 10. Safety requirements

- (A) All Solar Energy Systems shall:
- (1) Comply with the requirements of the State of Texas Utilities Code Chapter 39, section 39.916 (2011), to the extent such facility is interconnected to the retail electric supplier for net metering;
- (2) Include power outage protection so as to automatically terminate power generation during any power outage in any electrical utility system being served.
- (3) Shall be of a type which provides a low glare or anti-reflective layer applied to the solar panel to reduce the reflection or glare of the system.

### **SECTION 11. Discontinuance**

- (A) Notice of Discontinuance:
  - (1) In the event that all legally approved use of a solar energy system supporting structure or solar energy related equipment has been discontinued for a period of 180 days, the Mayor and/or the Mayor's designee may make a preliminary determination of discontinuance. In making such a determination, the Mayor and/or the Mayor's designee may request documentation and/or affidavits from the property owner regarding the structure's usage, including evidence that use of the structure is imminent. Failure on the part of a property owner to provide updated contact information for the owner of the solar energy system supporting structure or solar energy related equipment for four consecutive years will be presumptive evidence of discontinuance. At such time as the Mayor and/or the Mayor's designee reasonably determines that a solar energy system supporting structure or solar energy related equipment has been discontinued, the Mayor and/or the Mayor's designee will provide the property owner with a written notice of discontinuance by certified mail.
- (B) Declaration of discontinuance:

(1) Failure on the part of the property owner to respond to the notice of discontinuance within 90 days, or to adequately demonstrate that the structure is not discontinued, will be evidence of discontinuance. Based on the foregoing, or on any other relevant evidence before the Mayor and/or the Mayor's designee, the Mayor and/or the Mayor's designee may make a final determination of discontinuance, whereupon a declaration of discontinuance will be issued to the property owner by certified mail.

# (C) Removal of facility:

- (1) Within 120 days of a declaration of discontinuance, the property owner must either:
  - (a) Reactivate the use of the structure as a solar energy system supporting structure or solar energy related equipment or transfer ownership of structure to another owner who will make such use of the facility; or
  - (b) Dismantle and remove the facility. If the facility remains discontinued upon the expiration of 120 days, the property is declared a nuisance and the City of Penelope may enter upon the property and remove the facility, with all costs to be borne by the property owner.

This Ordinance shall be effective immediately upon its passage, approval and publication.

Approved this the 17 day of Aug., 2022.

Mayor

ATTEST:

City Secretary