### **ORDINANCE NO. 169 OF 2024**

BUTLER TOWNSHIP, COMMONWEALTH OF PENNSYLVANIA,
BY THE BUTLER TOWNSHIP BOARD OF SUPERVISORS
AND THE BOROUGH OF ARENDTSVILLE, COMMONWEALTH OF
PENNSYLVANIA, BY THE ARENDTSVILLE BOROUGH COUNCIL,
AMENDING AND SUPPLEMENTING THE ARENDTSVILLE
BOROUGH AND BUTLER TOWNSHIP ZONING ORDINANCE
(ORDINANCE NO. 164 OF 2022, AS AMENDED)

WHEREAS, the Pennsylvania Municipalities Planning Code. act of July 31, 1968, as amended, 53 P.S. §§ 10101 *et seq.*, enables a municipality through its zoning ordinance to regulate the use of property and to promote the conservation of energy through access to and use of renewable energy resources; and

WHEREAS, Arendtsville Borough and Butler Township seek to promote the general health, safety and welfare of the community by adopting and implementing amendments to the Zoning Ordinance providing for access to and use of solar energy systems; and

WHEREAS, the purpose of this Ordinance is to set forth requirements for solar energy systems.

**NOW THEREFORE BE IT ENACTED AND ORDAINED** by the Borough Council of Arendtsville Borough and the Board of Supervisors of the Township of Butler, Adams County, Pennsylvania, and it is enacted and ordained as follows:

**SECTION 1**: Article 4, Section 401 of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, entitled "Use Regulations," under the Agricultural Preservation District, shall be amended by restating Subsection C., Special Exception Uses, as follows:

- 1. Agribusiness Operation, in accordance with Section 1401.D.
- 2. Agricultural Tourism Operation, as either a Principal Use or as an accessory to a Farm or Agricultural Operation, in accordance with Section 1401.E.
- 3. Rural Events Venue, as either a Principal Use or as an accessory to a Farm or Agricultural Operation, in accordance with Section 1401.PP.
- 4. Tasting Room/Winery/Cidery/Brewery/Distillery, as either a Principal Use or as an accessory to a Farm or Agricultural Operation, in accordance with Section 1401.TT.

- 5. Wireless Communication Facility Co-location Inside Public Right-of-Way, proposed as either a stand-alone facility or as part of a DAS, in accordance with Section 1401.ZZ.
- 6. Wireless Communication Facility Co-location Outside Public Right-of-Way, proposed as either a stand-alone facility or as part of a DAS, in accordance with Section 1401.AAA.
- 7. Wireless Communication Facility Tower Based Inside Public Right-of-Way, proposed as either a stand-alone facility or as part of a DAS, in accordance with Section 1401.BBB.
- 8. Wireless Communications Facility Tower Based Outside Public Right-of-Way, in accordance with Section 1401.CCC.
- 9. Uses which, in the opinion of the Zoning Hearing Board, are of the same general character as the above Uses in Section 401 and which will not be detrimental to the intended purposes of this chapter.

**SECTION 2:** Article 5, Section 501 of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, entitled "Use Regulations," under the Land Conservation District, shall be amended by adding No. 13 under Subsection C., Special Exception Uses, as follows:

13. Solar Farm, in accordance with Section 1401.SS.

**SECTION 3**: Article 2, Section 201 of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, entitled "Definitions" shall be amended by adding the following definitions to those listed in Section 201 thereof, to be inserted in alphabetical order:

ACCESSORY SOLAR ENERGY SYSTEM: An area of land or other area used for a solar energy 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. Ground Mounted or freestanding Solar Energy Systems with an output size of not greater than 10kw shall be considered Accessory Solar Energy Systems. Roof Mounted Solar Energy Systems on the roofs of buildings used primarily for on-site use shall have no limit as to energy output. 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.

**SOLAR FACILITY CONNECTION**: The electric conveyance lines which connect a Solar Energy Facility to the high-voltage electric interconnection grid.

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 the collection of solar energy.

**SECTION 4**: Article 13, Section 1305 of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, entitled "Fences" shall amended to add the following as subsection F:

F. <u>Ground Mounted Solar Array Fences</u>: A ground mounted solar array shall be completely enclosed by a minimum of an eight (8) foot high fence with a self-locking gate. The use of barbed wire on fencing is strictly prohibited.

**SECTION 5**: Article 13, Section 1310 of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, entitled "Solar Panels" shall be deleted in its entirety and amended to read as follows:

#### Section 1310: Accessory Solar Energy Systems (ASES)

Use of ASES shall be permitted as an Accessory Structure in all zoning districts in accordance with the following standards. Solar Farms as defined in this Ordinance shall not be considered an Accessory Use or structure and shall be subject to regulation under Articles 3-12 and Section 1401.SS.

- A. <u>ASES Roof Mounted:</u> Roof mounted solar panels shall be permitted in accordance with the following standards.
  - 1. Roof mounted solar panels shall comply with the maximum Building Height requirements of the zoning district where the installation of the solar panel is proposed.

- 2. On pitched roofs, roof mounted solar panels shall be installed as close to parallel as possible to the pitch of the roof while not sacrificing the efficiency of the solar panel.
- 3. On flat roofs, roof mounted solar panels may be installed at an angle to improve the efficiency of the solar panel with regard to the predominant sun angle provided that the solar panel is placed in a manner to minimize its visibility from Street level. In no case may solar panels extend more than five (5) feet above the top of a flat roof.
- 4. Wall mounted ASES shall comply with the setbacks for principal and accessory structures in the underlying zoning districts.
- 5. Solar panels shall not extend beyond any portion of the roof edge.
- 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 including that the roof or wall is capable of holding the load imposed on the structure.

<u>ASES – Ground Mounted:</u> Ground mounted solar panels shall be permitted as an Accessory Structure in accordance with the following standards.

- 1. Ground mounted solar panels shall comply with the Setback requirements of the district where the installation of the solar panel is proposed.
- 2. Ground mounted solar panels shall not be permitted By-Right in any Front Yard. The Zoning Hearing Board may authorize, by Special Exception, the installation of a ground mounted solar panel in a Front Yard if the Applicant demonstrates that, due to solar access limitations, no location exists on the property other than the Front Yard where the solar panel can perform effectively.
- 3. Ground mounted solar panels shall not exceed a height of ten (10) feet.
- 4. Glare from ground mounted solar panels shall be directed away from adjoining properties and Street Rights-of-Way. Fences in accordance with Section 1305 and / or vegetative screens may be utilized to prevent glare from impacting adjoining properties or Street Rights-of-Way.
- 5. Stormwater Management

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- (a) Stormwater runoff from an ASES shall be managed in accordance with the requirements of the Arendtsville Borough and the Butler Township Subdivision and Land Development Ordinances.
- (b) Where Solar Panels are mounted above the ground surface allowing for vegetation below the panels, the horizontal area of the panel may be considered a Disconnected Impervious Area ("DIA") and therefore, will have no increase from the pre-development to post-development runoff coefficient. The horizontal area of the panel can only be considered a DIA if the following conditions apply:
  - i. Where natural vegetative cover is preserved and/or restored utilizing low impact construction techniques from the Pennsylvania Department of Environmental Protection Stormwater Best Management Practices Manual, including, but not limited to the following: minimizing the total disturbed area, minimizing soil compaction in disturbed areas, and re-vegetating and re-foresting disturbed areas using native species.
  - ii. Where the vegetative cover has a minimum uniform 90% perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation.
    - a. For panels located on slopes of 0 to 5% a minimum 4" height of vegetative cover shall be maintained.
    - b. For panels located on slopes between 5% and 10% a meadow condition shall be maintained.
    - c. Panels located on slopes between 10% and 15% cannot be considered DIA.
    - d. Solar Panels located on slopes over 15% are not permitted.
    - e. Vegetated areas shall not be subject to chemical fertilization or herbicide/pesticides application, except for those applications necessary to establish the vegetative cover or to prevent invasive species and in accordance with an approved Erosion and Sediment Control Plan.
    - f. Agrivoltaics, the co-development of the same area of land for both solar photovoltaic power and conventional agriculture, may be used provided that:

- (1) Only shade tolerant crops may be used,
- (2) Crops must be no tilled in,
- (3) A written erosion and sediment control plan must be developed for agricultural plowing or tilling activities or a portion of the overall farm conservation plan must identify BMPs used,
- (4) Any cutting or mowing of the agricultural crop is limited to a height of no less than 4 inches,
- (5) Application of chemical fertilization or herbicides/pesticides is limited to the agronomic needs to the crop(s).
- iii. Where the Solar Panels within a Solar Array are arranged in a fashion that:
  - a. Allows the passage of runoff between each Solar Panel, thereby minimizing the creation of concentrated runoff.
  - b. Allows for the growth of vegetation beneath the panel and between the Solar Arrays.
- iv. Where the length of the receiving, overland, vegetated area, downhill of each Solar Arrays is equal to or greater than the contributing, maximum, combined, horizontal length of the Solar Arrays. The grass area below each Solar Array shall not be considered in the length of the receiving, overland, vegetated area.
- v. Where the contribution flow path or total combined horizontal length of a Solar Array is less than seventy-five (75) feet.
- vi. Where less than 5% of the horizontal area of the Solar Panels themselves are disturbed and/or covered by the ground mounted support structures of foundation.
- vii. Where the lowest vertical clearance along the drip edge or drip line of all Solar Panels within a Solar Array is ten (10) feet or less from the surface of the ground but an adequate height to promote vegetative growth below the Solar Array.

- viii. Where the drip edge or drip line of the Solar Panels are mounted level to promote sheet flow discharge unless no more than 500 square feet of contributing surface will discharge to any one point, in which case a spreading device is required for the Concentrated discharges.
- (c) The horizontal area of any Solar Panel or Solar Array that cannot meet all the conditions to be considered DIA shall be treated as impervious area. These areas shall be included in the pre-development to post-development runoff analysis as impervious area to determine the need for Post Construction Stormwater Management ("PCSM") Best Management Practices.
  - i. Use of gravel is permissible under a panel or in the receiving downhill flow path; however, the use of gravel would not allow the horizontal area of the Solar Panel or Solar Array to be considered as a DIA.
  - ii. All impervious areas associated with the ASES such as roadways and support buildings cannot be considered a DIA and shall follow normal protocols when performing the PCSM stormwater analysis.
  - iii. When the ground mounted Solar Panels cannot meet the conditions to be considered a DIA, the impervious area shall be analyzed using the Industrial Land Use Description with Runoff Curve Numbers between 81 for Hydraulic Soil Group A and 93 for Hydraulic Soil Group D.
- 6. Buffering. Ground mounted ASES shall be buffered from any adjacent land uses or properties that is residentially zoned or used for residential purposes in accordance with the buffer Type B1 (one canopy tree per 40 linear feet, plus one flowering tree per 60 linear feet, plus one evergreen per 60 linear feet) requirements found in the Zoning Ordinance around the perimeter of the project.
- 7. 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.
- 8. 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,

unless the Applicant can demonstrate, to the satisfaction of the Borough or Township, that the ASES will not impede stormwater management, or in any other manner alter or impede storm water runoff from collecting in a constructed storm water conveyance system.

- C. <u>General Requirements:</u> The following requirements shall apply to all solar panel installations.
  - 1. **Building Permit Required**: The installation of solar panels shall be subject to permitting and inspections with regard to applicable provisions of the Pennsylvania Uniform Construction Code (UCC) in addition to any permitting required to demonstrate compliance with the provisions of this Ordinance. Issuance of any required Building permitting shall be listed as a condition of approval for the Zoning Permit required by this Ordinance.
  - 2. **Purpose of Facility**: The primary purpose of a solar panel installation shall be to provide power for the Principal Use of the property where the installation of said power generation is proposed. The primary purposes of the facility shall not be for the generation of power for commercial purposes, although this provision shall not be interpreted to prohibit the sale of excess power generated from time to time.
- D. <u>Accessory Solar Energy Systems (ASES)</u>: The following criteria are applicable to all Accessory Solar Energy Systems:
  - 1. ASES shall be permitted as a use by right in all zoning districts.
  - 2. The ASES 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 Arendtsville Borough and Butler Township, and with all other applicable fire and life safety requirements.
  - 3. Upon completion of installation, the ASES shall be maintained in good working order in accordance with standards of the Arendtsville Borough and Butler Township codes under which the ASES was constructed. Failure of the property owner to maintain the ASES in good working order is grounds for appropriate enforcement actions by Arendtsville Borough or Butler Township in accordance with applicable ordinances.

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

#### 5. Glare

- (a) All ASES 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.
- (c) Solar panels shall have a surface that minimizes glare and shall be shielded, buffered, and directed so that glare will not become a nuisance to adjoining properties, adjoining districts, and Streets.

#### 6. 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 system owner and/ or operator, or upon termination of the useful life of same.
- (b) The ASES shall be presumed to be discontinued or abandoned if no electricity is generated by such solar collector for a period of twelve (12) continuous months.
- (c) The ASES owner shall, at the request of the Borough or Township, provide information concerning the amount of energy generated by the ASES in the last 12 months.

#### 7. Permit Requirements

- (a) Zoning/building permit applications shall document compliance with this Section and shall be accompanied by drawings showing the location of the system on the building or property, including property lines.
- (b) 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.

**SECTION 6**: Article 14, Section 1401.SS of the Arendtsville Borough – Butler Township Joint Zoning Ordinance, shall be amended to delete the language of Section 1401.SS in its entirety and amended to read as follows:

#### SS. Solar Farm

A Solar Farm shall not be considered an Accessory Use, but may operate as a Principal Use on a Lot with other Principal Uses provided the following standards are met:

#### A. Criteria Applicable to All Solar Farms:

- 1. The facility shall receive Land Development Plan approval from the Township or Borough, respectively in accordance with the applicable municipal Subdivision and Land Development Ordinance. Should Special Exception review of the facility occur prior to Land Development Plan submission, Special Exception approval shall include a condition that the Applicant achieve Land Development Plan approval. Consultation from the Adams County Conservation District is required at the time of Special Exception application to evaluate potential for environmental impact and proposed Landscaping and maintenance plans. The proposed Solar Farm Plan shall comply with recommendations of the Conservation District regarding environmental impact reduction, drainage, plantings and Landscaping, and maintenance of said plantings and Landscaping.
- 2. The facility shall be situated to minimize impacts to Wetlands, threatened and endangered species, woodlands, and to minimize vegetation clearing, grading, and soil compaction. In no event shall wooded acreage comprising more than two percent (2%) of the deeded acreage of the Lot be removed.
- 3. Facilities located within the Floodplain Overlay (FO) District of this Ordinance or within a designated Wetland shall be subject to permitting and inspections with regard to applicable local, state, or federal environmental regulations. Issuance of any required permitting shall be listed as a condition of approval for the Zoning Permit required by this Ordinance.
- 4. For a Solar Farm proposed to be located on a property in the Land Conservation (LC) District, Class I, II, and III agricultural soils as identified in official Federal soils mapping, or a more accurate professional study, shall be identified. No more than one-half (1/2) of the identified Class I, II, and III agricultural soils on the property may be devoted to solar arrays.

- 5. The Solar Farm 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 Butler 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. All on-site transmission and plumbing lines shall be placed underground.
- 7. Solar Facility Connections shall be placed underground unless:
  - (a) The electric lines will be placed on existing utility poles that host existing electric, cable, or telephone lines; or
  - (b) The Applicant can demonstrate, to the satisfaction of the Township, that it is not possible to place the connection underground, in which case, only the portion of the line which is not capable of placement underground, as determined by the Township, may be placed above ground.
- 8. No portion of the Solar Farm 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 Solar Farm provided they comply with the prevailing sign regulations.

#### 9. Glare

- (a) All Solar Farms 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.
- (c) Solar panels shall have a surface that minimizes glare and shall be shielded, buffered, and directed so that glare will not become a nuisance to adjoining properties, adjoining districts, and Streets.

- 10. The Solar Farm 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 Solar Farm owner and/or operator shall make reasonable efforts to respond to the public's inquiries and complaints. A sign shall be posted providing the name of the operator, the facility's complete 911 address, and a 24-hour contact number.
- 11. The Solar Farm owner shall provide, at a frequency of no less than once per calendar year, a report to the Municipality confirming the electricity generated on a daily basis from the Solar Farm. The Municipality may, at its discretion, require the submission of interim reports to confirm the ongoing generation of electricity.

### 12. Decommissioning

- (a) The Solar Farm owner is required to notify the Township immediately upon cessation or abandonment of the operation. The Solar Farm shall be presumed to be discontinued or abandoned if no electricity is generated by the system for a period of twelve (12) continuous months.
- (b) The Solar Farm owner shall have twelve (12) months in which to dismantle and remove the Solar Farm including all solar related equipment or appurtenances related thereto, including but not limited to buildings, cabling, electrical components, roads, foundations, solar facility connections and other associated facilities.
- (c) To the extent possible, the materials shall be re-sold or salvaged.

  Materials that cannot be re-sold or salvaged shall be disposed of at a facility authorized to dispose of such materials by federal or state law. Where disposal occurs the Solar Farm owner shall inform the Municipality of the location where the materials are to be disposed.
- (d) Any soil exposed during the removal shall be stabilized in accordance with applicable erosion and sediment control standards.
- (e) Any access drive paved aprons from public roads may remain for future use.
- (f) The Solar Farm site area shall be restored to its pre-existing condition, suitable for its prior use, except the landowner may authorize, in writing, any buffer landscaping or access roads installed to accommodate the Solar Farm to remain.

- (g) Any necessary permits, such as Erosion and Sedimentation and NPDES permits, shall be obtained prior to decommissioning activities.
- (h) At the time of issuance of the permit for the construction of the Solar Farm, the owner shall provide financial security in the form and amount acceptable to the Township to secure its obligations under this Section.
  - i. The Solar Farm Developer shall, at the time of application, provide the Township with an estimate of the cost of performing the decommissioning activities required herein, together with an administrative and inflation factor of twenty-five percent (25%) to account for the cost of obtaining permits to complete said activities. The estimate may include an estimated salvage and resale value, discounted by a factor of twenty percent (20%), so that the Solar Farm Developer shall receive credit for eighty percent (80%) of the value. The Decommissioning Cost Estimate Formula shall be:

Gross Cost of Decommissioning Activities + Administrative Factor of 25% - Salvage and Resale Credit of 80% = Estimated Cost of Decommissioning

- ii. On every annual anniversary of the date of providing the decommissioning financial security the Solar Farm Owner shall provide an updated decommission cost estimate, utilizing the formula set forth above with adjustments for inflation and cost and value changes. If the decommissioning security amount changes, the Solar Farm Owner shall remit the increased financial security to the Township within 30 days of the approval of the updated decommissioning security estimate by the Township. Any updates to the cost estimate may require additional funds to be placed in escrow by the Solar Farm owner.
- iii. Decommissioning security estimates shall be subject to review and approval by the Township and the Solar Farm Developer/Owner shall be responsible for administrative, legal, and engineering costs incurred by the Township for such review.
- iv. At no time shall the decommissioning financial security be an amount less than \$500,000.00.

- v. The decommissioning security may be in the form of cash, letter of credit, or an investment grade corporate guarantee rated BBB-/Baa3 or better by S&P, Moody's, or AM Best, as applicable.
- vi. Prior to approval of any plan or permit for a Solar Farm, the Solar Farm Developer shall enter into a Decommissioning Agreement with the Township outlining the responsibilities of the parties under this Agreement as to the Decommissioning of the Solar Farm.
- vii. The financial security shall be managed in accordance with Sections 509 through 511 of the Pennsylvania Municipalities Planning Code, specifically, but not exclusively, with regard to those provisions regarding the release of the financial security to the Solar Farm owner as decommissioning activities are completed.

#### 13. Permit Requirements

- (a) Solar Farms shall comply with the Township subdivision and land development requirements through submission of a land development plan. The installation of Solar Farm shall be in compliance with all applicable permit requirements, codes, and regulations.
- (b) The Solar Farm owner and/or operator shall repair, maintain and replace the Solar Farm and related solar equipment during the term of the permit within seven (7) days to keep the Solar Farm in good repair and operating condition. The ground shall remain free of debris from damaged solar panels at all times.

#### B. Ground Mounted Solar Farm:

- 1. Minimum lot size -40 acres.
- 2. Excluded locations.
  - (a) Property listed on, or eligible for listing on the National Register of Historic Places as designated by the State Historic Preservation Office of the National Park Service.
  - (b) Property located with federally recognized historic boundaries as identified and maintained by the National Park Service's American Battlefield Protection Program.

- 3. Portion of Lot to be Devoted to Solar Arrays: For each lot on which a Solar Farm, or a component of a Solar Farm, is proposed, the following calculations shall be performed to determine the proportion of the lot on which solar arrays may be authorized.
  - (a) Calculate Constrained Area: Calculate the Constrained Area by calculating the sum of the acreage of the following features that appear on a lot.
    - i. Floodplains, as identified in the Butler Township Floodplain Ordinance.
    - ii. Natural and Man-Made Drainage Corridors, extending twenty-five (25) feet from the centerline of any such drainage feature.
    - iii. Wetlands.
    - iv. Wetlands Buffer extending fifty (50) feet from any wetland.
    - v. Slopes in excess of fifteen percent (15%).
    - vi. Wooded Areas.
    - vii. Road Rights-of-Way.
    - viii. Setback areas, as defined in the underlying zoning district.
  - (b) Calculate Solar Farm Development Area: Calculate the Solar Farm Development Area by subtracting the Constrained Area from the lot area.
  - (c) Calculate the Portion of the Solar Farm Development Area that may be devoted to Solar Arrays: Calculate the total acres of land within the Solar Farm Development Area that are comprised of Class I, II, and III agricultural soils, as identified in official Federal soils mapping or a more accurate professional study. Subtract one-half (1/2) of this figure from the Solar Farm Development Area to determine the Portion of the Solar Farm Development Area that may be devoted to Solar Arrays.
  - (d) For each lot on which a Solar Farm, or a component of a Solar Farm, is proposed, a map shall be provided by the applicant detailing the Constrained Area, the Solar Farm Development Area, the Class I, II, and

III agricultural soils, and the Portion of the Solar Farm Development that may be devoted to Solar Arrays.

(e) Solar Arrays shall only be placed within that portion of any lot that lies within the portion of the Solar Farm Development that may be devoted to Solar Arrays.

#### 4. Setbacks

(a) Solar Farms shall be set back a minimum of one hundred fifty (150) feet from any lot line.

### 5. Height

(a) All ground mounted Solar Farms shall comply with a ten (10) foot maximum height requirement. Solar Arrays shall not exceed ten (10) feet in height. For fixed solar arrays, height shall be measured at the highest point of the solar array above ground level. For solar arrays designed to rotate, height shall be measured with the solar array oriented at maximum tilt.

## 6. Stormwater Management

- (a) Stormwater runoff from an ASES shall be managed in accordance with the requirements of the Butler Township Subdivision and Land Development Ordinance.
- (b) Where Solar Panels are mounted above the ground surface allowing for vegetation below the panels, the horizontal area of the panel may be considered a Disconnected Impervious Area ("DIA") and therefore, will have no increase from the pre-development to post-development runoff coefficient. The horizontal area of the panel can only be considered a DIA if the following conditions apply:
  - i. Where natural vegetative cover is preserved and/or restored utilizing low impact construction techniques from the Pennsylvania Department of Environmental Protection Stormwater Best Management Practices Manual, including, but not limited to the following: minimizing the total disturbed area, minimizing soil compaction in disturbed areas, and re-vegetating and re-foresting disturbed areas using native species.

- ii. Where the vegetative cover has a minimum uniform ninety percent (90%) perennial vegetative cover with a density capable of resisting accelerated erosion and sedimentation.
  - a. For panels located on slopes of zero (0) to five (5) percent (%), a minimum four-inch (4") height of vegetative cover shall be maintained.
  - b. For panels located on slopes between five percent (5%) and ten percent (10%) a meadow condition shall be maintained.
  - c. Panels located on slopes between ten percent (10%) and fifteen (15%) cannot be considered DIA.
  - d. Solar Panels located on slopes over fifteen percent (15%) are not permitted.
  - e. Vegetated areas shall not be subject to chemical fertilization or herbicide/pesticides application, except for those applications necessary to establish the vegetative cover or to prevent invasive species and in accordance with an approved Erosion and Sediment Control Plan.
  - f. Agrivoltaics, the co-development of the same area of land for both solar photovoltaic power and conventional agriculture, may be used provided that:
    - (1) Only shade-tolerant crops may be used;
    - (2) Crops must be no tilled in or a written erosion and sediment control plan must be developed for agricultural plowing or tilling activities, or a portion of the overall farm conservation plan must identify BMPs used;
    - (4) Any cutting or mowing of the agricultural crop is limited to a height of no less than four (4) inches; and
    - (5) Application of chemical fertilization or herbicides/ pesticides is limited to the agronomic needs to the crop(s).

- iii. Where the Solar Panels within a Solar Array are arranged in a fashion that:
  - Allows the passage of runoff between each Solar Panel, thereby minimizing the creation of concentrated runoff.
  - b. Allows for the growth of vegetation beneath the panel and between the Solar Arrays.
- iv. Where the length of the receiving, overland, vegetated area, downhill of each Solar Arrays is equal to or greater than the contributing, maximum, combined, horizontal length of the Solar Arrays. The grass area below each Solar Array shall not be considered in the length of the receiving, overland, vegetated area.
- v. Where the contribution flow path or total combined horizontal length of a Solar Array is less than seventy-five (75) feet.
- vi. Where less than five percent (5%) of the horizontal area of the Solar Panels themselves are disturbed and/or covered by the ground mounted support structures of foundation.
- vii. Where the lowest vertical clearance along the drip edge or drip line of all Solar Panels within a Solar Array is ten (10) feet or less from the surface of the ground but an adequate height to promote vegetative growth below the Solar Array.
- viii. Where the drip edge or drip line of the Solar Panels are mounted level to promote sheet flow discharge unless no more than 500 square feet of contributing surface will discharge to any one point, in which case a spreading device is required for the concentrated discharges.
- (c) The horizontal area of any Solar Panel or Solar Array that cannot meet all the conditions to be considered DIA, shall be treated as impervious area. These areas shall be included in the pre-development to post-development runoff analysis as impervious area to determine the need for Post Construction Stormwater Management ("PCSM") Best Management Practices.
  - i. Use of gravel is permissible under a panel or in the receiving downhill flow path; however, the use of gravel would not allow the

- horizontal area of the Solar Panel or Solar Array to be considered as a DIA.
- ii. All impervious areas associated with the ASES such as roadways and support buildings cannot be considered a DIA and shall follow normal protocols when performing the PCSM stormwater analysis.
- iii. When the ground mounted Solar Panels cannot meet the conditions to be considered a DIA, the impervious area shall be analyzed using the Industrial Land Use Description with Runoff Curve Numbers between eighty-one (81) for Hydraulic Soil Group A and ninety-three (93) for Hydraulic Soil Group D.
- 7. Ground mounted Solar Farm Facilities shall be screened and buffered in accordance with the following standards.
  - (a) Vegetative buffering shall be installed around the entire perimeter of the Solar Farm installation, except where the Zoning Officer, determines that the retention of existing trees within the vegetative buffering area may constitute the required vegetative buffer.
  - (b) The vegetative buffering shall be installed along the exterior side of the fencing. All required vegetative buffering shall be located within fifty (50) feet of the required fencing.
  - (c) Vegetative buffering shall be designed to emulate the mix of species and appearance of existing tree lines, hedge rows, and wooded areas already in existence within the landscape where the Solar Farm is proposed. The applicant shall assess, as a component of the Buffer Yard Plan, the species mix and characteristics found in existing tree lines, hedge rows, and wooded areas surrounding the Solar Farm, and document that the vegetative buffering is designed to emulate these characteristics.
  - (d) Vegetative buffering shall be selected to provide year-round buffering and shall be of sufficient height, density, and maturity to screen the facility from visibility, as set forth herein within thirty-six (36) months of the installation of the Solar Farm.
  - (e) The primary use of evergreen trees shall not be permitted, and a monotonous straight row of the same species, particularly evergreen trees, is specifically prohibited.

- (f) A combination of Natural topography and vegetation can serve as a buffer provided that the Solar Farm will not be visible from public roads, public parks, or existing residences on surrounding properties. Earthen berms may not be created to serve as a buffer. Visibility of a Solar Farm shall be determined based on a photograph taken at a point with a digital camera with an APS-C Sensor and a thirty-five millimeter (35 mm) focal length lens. A Solar Farm shall be considered not visible provided that less than five percent (5%) of the Solar Farm is visible in accordance with the measure of visibility set forth above.
- 8. Ground-mounted Solar Farm Facilities shall not be placed within any legal easement or right-of-way location or be placed within any storm water conveyance system.

### 9. Security

- (a) All ground-mounted Solar Farms shall be completely enclosed by a minimum eight (8) foot high fence with a self-locking gate.
- (b) A clearly visible warning sign shall be placed at the base of all padmounted transformers and substations and on the fence surrounding the Solar Farm informing individuals of potential voltage hazards. The use of transformers, inverters, and substations shall emit no obnoxious noise, glare, dust, odor, vibration, electrical disturbance or any other objectionable impact beyond the property lines.

#### 10. Access

- (a) At a minimum, a twenty-five feet (25') wide access road must be provided from a state or township roadway to the Solar Farm site that is paved and maintained in a dust free condition.
- (b) At a minimum, a twenty feet (20') wide cartway shall be provided between the solar array rows to allow access for maintenance vehicles and emergency management vehicles including fire apparatus and emergency vehicles. Cartway width is the distance between the bottom edge of a solar panel to the top edge of the solar panel directly across from it measured at its greatest parallel width.
- (c) Access to the Solar Farm shall comply with the municipal access requirements in the Subdivision and Land Development Ordinance.

- 11. The ground mounted Solar Farm shall not be artificially lit except to the extent required for safety or applicable federal, state, or local authority.
- 12. The applicant must provide written comments from the relevant electric company regarding the capacity of the existing transmission lines envisioned to receive the electricity generated from the utility-scale solar facility. Proof of application for interconnection to the existing electricity system is required.

# C. Roof and Wall Mounted Principal Solar Farm and Energy Facility:

- 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 including that the roof or wall is capable of holding the load imposed on the structure.
- 2. The total height of a building with a roof and wall mountain system shall not exceed by more than 3 feet above the maximum building height specified for principal or accessory buildings within the applicable zoning district.

#### D. Well Water Testing:

- 1. Water samples from domestic supply wells on lots adjacent to the proposed facility shall be checked for cadmium, zinc, nickel, mercury and copper by a recognized Pennsylvania laboratory.
- 2. The results of such testing shall be provided to the Township and the owners of the wells prior to the start of development.

**SECTION 7:** Repealer. All provisions of previous ordinances of Arendtsville Borough – Butler Township, or parts thereof, which are contrary to or inconsistent with this Ordinance, are expressly repealed.

**SECTION 8:** Savings Clause. In all other respects the Arendtsville Borough – Butler Township Joint Zoning Ordinance will remain in full force and effect.

**SECTION 9:** Severability. In the event any provision, section, sentence, or clause or part of this Ordinance shall be held to be invalid, such invalidity shall not affect or impair any remaining provisions, section, sentence, clause or part of this Ordinance, it being the intent of the Township that such remainder shall remain in full force and effect.

SECTION 10: Effective Date. This Ordinance shall become effective immediately.

IN WITNESS WHEREOF, the present Ordinance has been duly enacted and ordained by the Butler Township Board of Supervisors this 20th day of August, 2024.

== = 55001 x 544000 point of 5 apor 43018 this	3 day of August, 2024.
BUTLER TOWNSHIP, COUNT BUTLER TOWNSHIP B	TY OF ADAMS, PENNSYLVANIA BOARD OF SUPERVISORS
ATTEST:	BUTLER TOWNSHIP
Township Secretary	By Lower Wolfinson, Chairman
IN WITNESS WHEREOF, the present Ordinance has been duly enacted and ordained by the Arendtsville Borough Council this 21 <sup>st</sup> day of August, 2024.	
BOROUGH OF ARENDTSVILLE, COUNTY OF ADAMS, PENNSYLVANIA ARENDTSVILLE BOROUGH COUNCIL	
ATTEST:	BOROUGH OF ARENDTSVILLE
Rare H Merzes Borough Secretary	By: Jay Johnson, Council President
	David Kaughman Mayor